



COATED REEL SPECIFICATION

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Version Log

Version	Date	Author	Change
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V2.2	09/04/2024	Brin Russell	Minor amendments.

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Substrate.

Only materials recommended and approved by Ravenwood Packaging Ltd should be used to produce Ravenwood Linerless Labels. A full, up to date list of approved materials and suppliers can be obtained upon request.

Silicone.

Only silicone recommended and approved by Ravenwood Packaging should be used.

Silicone coat weight should be between 0.5 and 1.5gsm.

Although various sizes of silicone stripe rollers can be supplied/used on the coater, it is good practice to use the narrowest silicone wheel available and still have a 2mm overlap of the adhesive. This reduces the amount of silicone used.

Silicone should be fully cured. There must be no evidence of deadened adhesive and no sign of smearing on the surface of the silicone. The silicone coating should not rub off the substrate. Silicone should overlap the area of the adhesive line by approximately 2mm on each side, except where the adhesive line is 1mm away from the edge of the label.

There must be no silicone on the reverse of the label.

Silicone lines should never encroach on a varnish free area.

Adhesive.

Only recommended and approved adhesives should be used.

Adhesive lines should be 12mm wide unless the application or design of the label requires an alternative width.

Coat weight of adhesive should be as follows.

- Paper substrates 28-32gsm
- Film substrates 24-28gsm

Coat weights lighter than specified above will cause problems with transferring the label through the applicator and problems adhering to the finished product.

Coat weights higher than those listed above will cause build-up of adhesive on the transfer belts and the blade of the applicators. This can also lead to jams on the applicators.

Reel Cores

5 mm wall thickness and an internal diameter of 76mm.

Reverse Print.

(On the reverse of labels)

Maximum of 70% darkness in comparison to the registration mark. Label design should avoid, where possible, placing reverse text in alignment with the registration/eye mark so as not to generate a misfire (trials must be completed before full production is run).



Finished reels.

Labels are to be wound on a core that is either the same width as the substrate or 2mm shorter at each end. The core should not protrude past the edge of the label. Cores should have an inside diameter of 76mm and a wall thickness of 5mm. Thinner wall thicknesses may result in reel damage and the inability for the end user to install the reel of labels on an applicator.

Finished reels should have an outside diameter of no more than 245mm.

Reels should be flat at the edges (no gramphoning where possible and never more than a 10mm variation in the edge position).

The finished reels should be firm to the touch where the lines of adhesive are positioned. Air gaps at the end/edges of a finished reel will allow the ingress of Oxygen leading to Oxidization of the adhesive. This would lead in the future to a failure in the performance of the labels over time.

Labels should be wound to the desired direction (left edge leading, right edge leading, foot leading or head leading).

Registration Mark / Eye Mark

Eye mark should be positioned to the centre panel of the label length with best location around the printable area. Eye mark should be on the leading edge of the label.

Plastic labels sensor mark should be clearly visible, this can be a part of the artwork yet should follow basic principles of two defined changes for the sensor to work. Trials must be completed on the machine which will be running these labels.

Eye mark should be 100% black.

Fork Sensors

Fork sensors are located at the rear of the NOBAC applicators and are designed to work with onboard tracking of the machine. They must see solid labels to function, should plastic clear labels be used, you must use solid colour on the edge of the reels to trigger a signal.

Label Transportation and Storage.

Reels of labels must be transported and stored on their ends (core vertical to the ground). Labels left on their sides (cores horizontal) will telescope over time and may become unusable.

Labels should be boxed in either single cartons or large pallet boxes. Where labels are stacked in large pallet boxes, divider sheets of cardboard should be used in between each layer of reels. Reels should not be able to fall over within the box. Extra packing should be used to prevent reels sliding around during transport.

Ensure the boxes are secured to any pallet prior to shipping. Banding straps should be used as well as plastic wrapping due to the weight of labels.

Store at a temperature of 12 -20° C, relative humidity 45-55%.

- Allow reel time to acclimatise if moving it from differing temperatures or damp conditions (Production areas) (Acclimatisation can take up to 24 hours)
- Extreme/rapid temperature and humidity changes should be avoided.
- Reels should be stored in the bag provided.



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- Optimum application temperature for the labels is 5C degrees or below
- If the glue is too warm this can cause excessive glue to build up on machine belts/blade
- Store away from direct sunlight and not next to any heat outlet such as a radiator.
- Rotate stocks so that the oldest reels are used first.
- Store reels of linerless labels on their ends, never horizontal.
- Do not hang reels on pegs, or stack them in such a way that the inner core is distorted, or at an angle which will encourage coning.
- Do not remove full reels from the original plastic bag until required.
- Return partly used reels of printed labels into their original plastic bags, and put them back into label store, do not leave on applicator when not in use.



Print issues.

Score lines / perforations should not be within 2mm of glue lines.
Barcode and any other print area should be on base material with no varnish or spot printing for colour. Blocker can be used to enable better thermal transfer.

Keyline design

Glue lines should be placed within +/- 0.5mm of the keyline design.

Master job layouts should be created before any amends are made to the label design.
Print area location should be no closer than 5 mm to any glue line.

Keyline's to be designed and checked against the machine in question and full trial reels completed before production labels are created.

Excessive glue lines should be avoided so as not to clog the blade on coater and the applicator.

Score lines and glue lines should not be overlaid with adhesive and/or silicone.

All trays must have trial reels completed to confirm application at point of PDI

Shaped labels must be fully Tested on Coater and applicator.

Signed.

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Date 09/04/202



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