

WB PACKAGING LIMITED

PRODUCTION STANDARD TOLERANCES

1. **Production Standard:**

A. **Purpose:**

- i) To provide a basis for agreement between purchaser and supplier
- ii) To provide information for the guidance of the producers, distributors and users

B. **Scope:**

This standard covers dimensional and thickness tolerances, using the relevant PIFA Standards as a guideline, for the following products manufactured from Low Density Polythene, printed and unprinted, natural and pigmented

- i) Layflat Tubing, Gusseted Layflat Tubing, Centre-Fold Sheet, Single Wound Sheet and J-Fold Sheet
- ii) Bottom Weld Bags including Heavy Duty Sacks
- iii) Side Weld Bags, excluding Skirt Side Weld

C. **Tolerances**

- i) Film Thickness

Parameters: All film within a range of 25-250 microns

The average thickness shall be within +/- 10% of the nominal and be the mean of 10 individual measurements taken at random over the circumference of the tubing

Nominal	Minimum	Maximum
25 Microns	22.5mu	27.5mu
30 Microns	27mu	33mu
40 Microns	36mu	44mu
50 Microns	45mu	55mu
60 Microns	54mu	66mu

70 Microns	63mu	77mu
80 Microns	72mu	88mu
90 Microns	81mu	99mu
100 Microns	90mu	110mu
150 Microns	135mu	165mu
200 Microns	180mu	220mu
250 Microns	225mu	275mu

Tolerances for intermediate thickness shall be interpolated from these values

ii) Film Width

Parameters: All Reel Film, except that for conversion into Heavy Duty Sacks, with a width of up to 1800mm and within a thickness range of 25-250 microns

The width of the film, and the width of open gussets (see page 6, figure 1) shall be measured off the reel and the tolerances shall be as follows:

Widths	Up To 250mm	+/- 6mm
Widths Above	250 - 499mm	+/- 9mm
"	500 - 749mm	+/- 12mm
"	750 - 999mm	+/- 15mm
"	1000 - 1499mm	+/- 25mm
"	1500 - 1800mm	+/- 40mm

<p>OPEN GUSSETS +/- 5% of nominal width</p>

iii) Film width – Heavy Duty Sacks

Parameters: All LFT and GLFT for conversation into Heavy Duty Sacks, within a width range of 380-810mm and a thickness of 100-250 microns

The width of the film, and the width of the open gussets, shall be measured off the reel and the tolerances shall be as follows:

Widths	380 – 600mm	+/- 7mm
Widths	601 – 810mm	+/- 15mm

<p>OPEN GUSSETS +/- 5% of nominal width</p>

iv) Bottom Weld Bags

Parameters: All bags manufactured from LFT and GLFT and within a width range of up to 1100mm, a length range of up to 2795mm and a thickness range of 25-250 microns

The width of the bag and the width of open gussets shall be measured using the C (ii) film width chart. The length of the bag is measured from the top to the bottom.

The thickness shall be measured as at C (i)

The length tolerances shall be as follows:

Nominal Length	200mm	-3mm & +5mm
"	300mm	-3mm & +5mm
"	400mm	-3mm & +5mm
"	500mm	-5mm & +8mm
"	1000mm	-5mm & +8mm
"	2000mm	-5mm & +10mm
"	2795mm	-5mm & +10mm

Tolerances for intermediate lengths shall be interpolated from these values

v) Side Weld Bags

Parameters: Within a width range of up to 900mm, a length range of up to 1160mm and a thickness range of 25-100 microns

The tolerances for the length of the bag are as for the widths in C (ii), due to the side welding

The thickness shall be measured as at C (i)

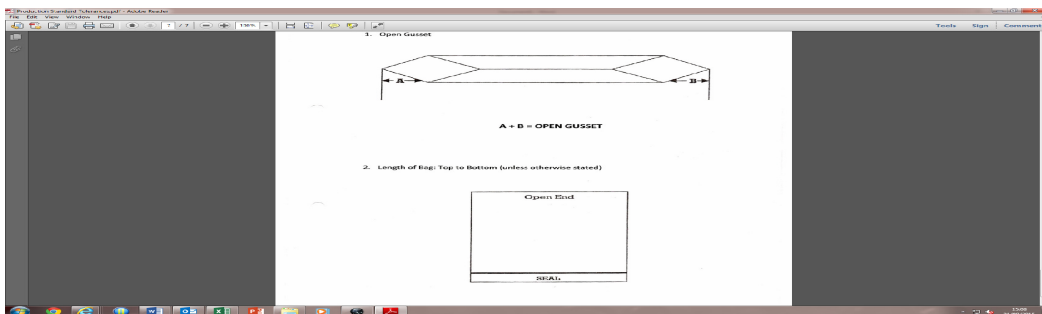
The width tolerances shall be as follows:

Nominal Opening Width	100mm	+/- 3mm
"	200mm	+/- 5mm
"	300mm	+/- 6mm
"	400mm	+/- 8mm
"	500mm	+/- 10mm
"	600mm +	+/- 12mm

Tolerances for intermediate widths shall be interpolated from these values

Figures

1) Open Gusset



A + B = OPEN GUSSET

2) Length of Bag: Top to Bottom (unless otherwise stated)

