

YOUR INNOVATIVE PACKAGING RESOURCE

Conversion Formulas

| To determine weight per M: | |
|---------------------------------------|-----|
| (LDPE)W x L x Gauge divide by 15 = | #/M |
| (HPDE)W x L X Gauge divide by 14.66 = | #/M |
| (T-shirt) Above less 10% = | #/M |
| | |
| Micron x .03937 = Mil | |
| Millimeters x .03937 = Inches | |
| Centimeters .3937 = Inches | |
| | |

The Topp Group LLC is a packaging broker firm dedicated to providing a range of high quality, made-to-order flexible packaging products to a network of wholesale distribution.



| Decimal E | quivalents | | |
|-----------|------------|-------|-------|
| 1 | 1,000 | 1/64 | .0156 |
| 1/2 | .500 | 3/64 | .0469 |
| 1/4 | .250 | 5/64 | .0781 |
| 3/4 | .750 | 7/64 | .1094 |
| 1/8 | .125 | 9/64 | .1406 |
| 3/8 | .375 | 11/64 | .1719 |
| 5/8 | .625 | 13/64 | .2031 |
| 7/8 | .875 | 15/64 | .2344 |
| 1/16 | .0625 | 17/64 | .2656 |
| 3/16 | .1875 | 19/64 | .2969 |
| 5/16 | .3125 | 21/64 | .3281 |
| 7/16 | .4375 | 23/64 | .3594 |
| 9/16 | .5625 | 25/64 | .3906 |
| 11/16 | .6875 | 27/64 | .4219 |
| 13/16 | .8125 | 29/64 | .4531 |
| 15/16 | .9375 | 31/64 | .4844 |
| 1/32 | .0313 | 33/64 | .5156 |
| 3/32 | .0938 | 35/64 | .5469 |
| 5/32 | .1563 | 37/64 | .5781 |
| 7/32 | .2188 | 39/64 | .6094 |
| 9/32 | .2813 | 41/64 | .6406 |
| 11/32 | .3438 | 43/64 | .6719 |
| 13/32 | .4063 | 45/64 | .7031 |
| 15/32 | .4688 | 47/64 | .7344 |
| 17/32 | .5313 | 49/64 | .7656 |
| 19/32 | .5938 | 51/64 | .7969 |
| 21/32 | .6563 | 53/64 | .8281 |
| 23/32 | .7188 | 55/64 | .8594 |
| 25/32 | .7813 | 57/64 | .8906 |
| 27/32 | .8438 | 59/64 | .9219 |
| 29/32 | .9063 | 61/64 | .9531 |
| 31/32 | .9688 | 63/64 | .9844 |

High Density Production Gauges Compared with Approximate Strength Equivalents In Low Density and Linear Low Density

| HMW/HD Gauge, Expressed n Microns | Same HMW/HD Gauge Expressed in MILS | Approximate Conventional LDPE (Low Density POLY) Strength Equivalent | Approximate LLDPE (Linear Low Density) Strength Equivalent |
|--|--|---|---|
| 6 | 0.23 | 0.7 mil | .45 mil |
| 7 | 0.27 | 0.8 mil | .55 mil |
| 8 | 0.31 | 0.9 mil | .65 mil |
| 9 | 0.35 | 1.0 mil | .70 mil |
| 10 | 0.39 | 1.2 mil | .80 mil |
| 11 | 0.43 | 1.3 mil | .85 mil |
| 12 | 0.47 | 1.4 mil | .95 mil |
| 13 | 0.51 | 1.5 mil | 1.0 mil |
| 14 | 0.55 | 1.65 mil | 1.1 mil |
| 15 | 0.59 | 1.75 mil | 1.2 mil |
| 16 | 0.63 | 1.9 mil | 1.3 mil |
| 17 | 0.66 | 2.0 mil | 1.35 mil |
| 18 | 0.70 | 2.1 mil | 1.4 mil |
| 19 | 0.74 | 2.2 mil | 1.5 mil |
| 20 | 0.78 | 2.4 mil | 1.6 mil |
| 21 | 0.82 | 2.5 mil | 1.65 mil |
| 22 | 0.86 | 2.6 mil | 1.7 mil |
| 23 | 0.90 | 2.7 mil | 1.8 mil |
| 24 | 0.94 | 2.8 mil | 1.9 mil |
| 25 | 0.98 | 3.0 mil | 2.0 mil |



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Poly Bag Dimensions

The first dimension stated when describing a poly bag is the width.

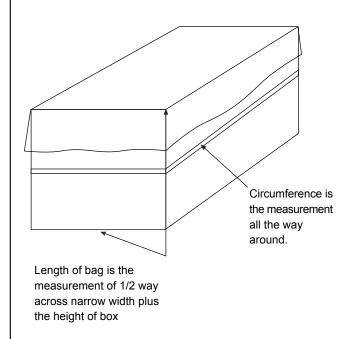
| Flat Bags are described as: | Width x Length x Gauge |
|---------------------------------|--|
| Side Gusset are described as: | Width x Gusset x Length; Gauge |
| Bottom Gusset are described as: | Width x Length x Bottom Gusset; Gauge |

Bag measurements are INSIDE dimensions.

How to Measure for Box Liners

Width = (the circumference of the box + 2) +2 inches. The circumference equals the sum of the length of each side.

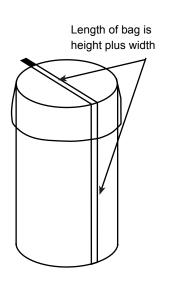
Length = 1/2 the narrow width + the height of the box. Add 5 to 8 inches extra material to tie off or fold over.



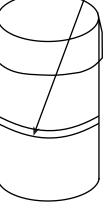
How to Measure for DrumLiners

Width = (the circumference of the drum + 2) +2 inches. Use a flexible tape measure and measure around the widest part of the drum.

Length = (height of the drum + the width (the diameter) + 4 inches. Add an extra 4 inches to fold over or tie the bag.



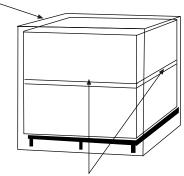
Circumference is the measurement all the way around



How to Measure for Pallet Covers

Width = (the circumference of the pallet + 2) +4 inches. The circumference equals the sum of the length of each side. Length = (1/2 the narrow width + the height) + 2 inches.

Length of bag is measurement of 1/2 way across the narrow width plus height of load



Circumference is measurement all the way around