



Tint Man Tips

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Tip: Determining amount of film left on roll
Reference: TMT 011 Revision 001

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One of the most aggravating things that used to happen to me, during my years in the business is running out of film. It always happens when I least expect it, and always at the worst time. Wouldn't it be nice if there was a simple method that I could use to determine the footage left on any given roll? I used to just write down on the outside of the box how many feet I pulled off, but I found that sometimes I either forgot or took off more than I thought I did. Either that or the film goblins, were taking the film when I left for the day. So I use a basic method using the weight to get the amount of film.

The net weight of film times the square feet per pound all divided by the film width (in feet) equals the approximate length of the roll. It is definitely an approximation because the thickness of the layers in window film vary greatly. If you like math it looks like this:

$$(\text{Net Wt} * \text{SF/LB}) / \text{Width} = \text{Length (as I said, approximately)}$$

To do it you need 3 things:

- Net Weight of the film only - no core, no box, no wrapper etc. Our cores weigh about .027 lbs/inch. Weigh the roll and subtract the appropriate amount of core weight. Now you know how much the "film only" weighs (The Net Weight). Remember, other cores weigh differently.
- Square Feet per Pound(#): Here are some rough approximations, but you ought to measure your film over several different production batches: 1 Mil = 58 sf/#, 1.5 Mil = 49 sf/#, 2 Mil = 43 sf/#. Don't take these numbers to be dead on. Every roll of film is different, as thickness of film and coatings vary greatly.

If my sample numbers don't work for your film, you can figure out your own square feet per pound numbers. A good way to get this number for your film is to cut an exact 1 ft. x 1 ft. square piece and weigh it. One pound divided by the weight of your sample is the square feet per pound.

- The web width in feet: Pretty simple - Width in inches divided by 12.
20" = 1.67 ft, 36" = 3.00 ft, 40" = 3.34 ft, etc. etc.

There you go! You have all the info you need to figure out the roll footage from the weight! Here is an example of a roll I had... 40" wide, Marathon automotive film, On the scale - 6 lbs...

First get the net weight film only: 6#s - 1.08# core = 4.92# film only	Johnson Cores weigh about .027 per inch 40" x .027 = 1.08#s of core - Remember they vary.
Get the total square feet: 4.92# * 49 = 241 sq feet on the roll	Total square feet equals the net weight times the square feet per pound. Examples may be 1 Mil = 58 sf/#, 1.5 Mil = 49 sf/#, 2 Mil = 43 sf/#
Get the length of the roll: 241 Sq Ft / 3.34 ft = 72 Lineal Feet	Length equals the total square feet divided by the width in feet (not inches) i.e. 20"=1.67 ft, 36"= 3.00 ft, 40"= 3.34 ft

Ok, I admit that the method is not all together that simple or short, but it seems to work for me. At least I have an approximate idea of the footage on any given roll, before I start a job. It saves me from starting a job only to find that I do not have enough material to complete it, which makes me a happier person.

I keep the table above on my wall, so I can quickly refer to it when ever I need it!



Best Regards,

THE TINT MAN

