## TECH TIPS

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## Square Footage Calculator for Multiple Width Flooring

Has this happened to you? A customer calls you up stating that we miscalculated a certain width of material during the packaging process and now they are short only on the 6 " wide material, not the $41 / 2 "$ or the $71 / 2 "$ (It could be any width I'm using 6 " as an example only). Could it be that our calculations are off? The answer is a simple No! Our calculations are spot on and here is how you can prove it:

Let's use our Tuscan product as an example. We know there are $41.5 \mathrm{~s} / \mathrm{f}$ contained in each carton, right! But how do we determine the required amount of $s / f$ needed for each of the individual widths of flooring? Good question and it comes with a simple answer:

Step 1: Add the widths of each size to be used (i.e., $4.5 "+6 "+7.5 "=18 "$ ). This will be your Total Width.

Step 2: Divide individual widths by Total Width of 18 "
$4.5^{\prime \prime} \div 18^{\prime \prime}=.250$
$6.0^{\prime \prime} \div 18^{\prime \prime}=.333$
$7.5^{\prime \prime} \div 18^{\prime \prime}=.417$
Step 3: Multiply each result by the total $\mathrm{s} / \mathrm{f}$ (for this example) in the carton.

| $41.5 \mathrm{~s} / \mathrm{f}$ | $41.5 \mathrm{~s} / \mathrm{f}$ | $41.5 \mathrm{~s} / \mathrm{f}$ |
| :---: | :---: | :---: |
| . 250 | . 333 | . 417 |
| $=10.375 \mathrm{~s} / \mathrm{f}$ | = $13.82 \mathrm{~s} / \mathrm{f}$ | $=17.31 \mathrm{~s} / \mathrm{f}$ |
| @ 4.5" | @ 6.0" | (a) 7.5 |

Double Check: Add the individual $\mathrm{s} / \mathrm{f}$ together
(i.e., $\mathbf{1 0 . 3 7 5}+\mathbf{1 3 . 8 2}+\mathbf{1 7 . 3 1}=\mathbf{4 1 . 5} \mathbf{~ s} /$ f)

Packaging information for our Tuscan Product Line:

- Each carton contains approximately $41.5 \mathrm{~s} / \mathrm{f}$
- Each packaged row measures out to 82.750 inches.
- Each width if you were to align them (individually) end to end would measure 331 lineal inches.

How to calculate total $\mathrm{s} / \mathrm{i}$ (square inches) into $\mathrm{s} / \mathrm{f}$ (square feet):
Example: $4.5 " \times 331 "=1,489.5$ total s/i. Now divide by $144=10.344 \mathrm{~s} / \mathrm{f}$
$6.0 " \times 331 "=1,986.0$ total s/i. Again divide by $144=13.79 \mathrm{~s} / \mathrm{f}$
$7.5 " \times 331 "=2,482.5$ total s $/ \mathrm{i}$. Again divide by $144=\underline{17.24 \mathrm{~s} / \mathrm{f}}$ 41.374 s/f

Note: The reason for dividing 144 into the total s/i of each individual size width is that there are $144 \mathrm{~s} / \mathrm{i}$ in one $\mathrm{s} / \mathrm{f}$.

Note: $\mathbf{4 1 . 3 7 4} \mathbf{~ s} / \mathbf{f}$ is closer to the actual $\mathrm{s} / \mathrm{f}$ per carton.

