

Microsoft Excel 2007

Relative and Absolute References



About Cell References

Cell references are an important part of creating formulas in Excel. Using cell references allows your formulas to update automatically if the value in a particular cell changes, but using cell references properly can also assist you in updating formulas as cells are copied or moved. There are three basic types of cell references, each serving a different purpose, *Relative*, *Absolute* and *Mixed*. This document will discuss the difference between Relative and Absolute cell referencing.

Summary

About Cell References

Relative Cell References

Absolute Cell References

1. Make a Cell Reference Absolute

Relative Cell References

Relative referencing is the default in Excel. Relative references will change in relation to the new location of the formula. Relative references identify cells based on their relationship to the cell containing the reference. For example, if you copied a formula from column A to column B and the formula contained a relative cell reference to cell A12, the formula would change to refer to cell B12.

Absolute Cell References

References that remain the same when a formula is copied to a new location. No matter where the formula or the values in the original cell are moved, the formula will continue to refer to the same cell. For example, if a formula using an absolute cell reference to cell A12 was copied to another column, the cell reference to A12 would remain constant.

Relative and absolute cell references can be used in all situations that require cell references, including cell ranges and formulas.

A formula, cell range, or cell reference can have both relative and absolute components. By adding a dollar sign (\$) before either the column or row location or both, that reference becomes absolute (or anchored). When adding dollar signs to cell references, only the portion of the reference directly following the dollar sign is absolute. To keep the entire cell reference constant, place a dollar sign before both the column and row location. For example, the reference \$A\$12 will anchor cell A12 in your formulas where ever it may be used.

Note: Another term sometimes used for Absolute Reference is *Anchored Reference*, a reference that does not move.

To Make a Cell Reference Absolute (2 methods):

1. Within the desired formula, before the part of the reference that you would like to be absolute, e.g. A12, type a dollar sign (\$)

OR

2. In the **Formula bar**, click the cell reference you want to change, e.g. A12.
3. Then, press the **F4** key on the keyboard. The cell reference changed to \$A\$12.

Note: Pressing F4 enables you to toggle between being relative, absolute and two mixed cell references. When pressing F4, your cell reference will cycle through the following progression: \$A\$12, A\$12, \$A12, A12.

