

Microsoft Excel Creating a Custom Number Format



Creating a Custom Number Format

Excel has several built-in number formats and you can create your own specialised formats using format codes.

Custom number formats are stored at the workbook level and you will have to incorporate them into a template or style to use them in another workbook.

The cell number format never affects the cell's underlying true value.

Number format codes have up to four sections, each separated by a semicolon:

Positive Numbers; Negative Numbers; Zero Values; Text Values

You do not have to include all four sections, should you use only one section then all number types will use that format. Text is only affected by a number format when the last section is used.

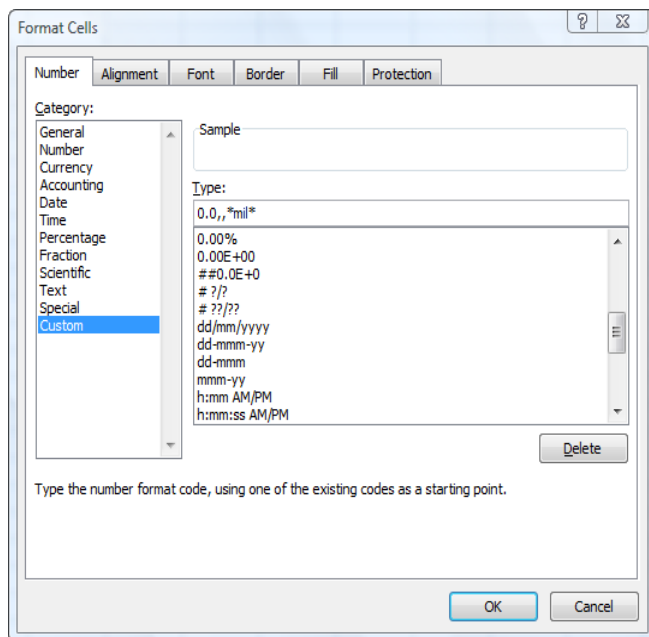
Use the semicolon as a positional marker if you wish to leave out particular sections, for example:

Positive Numbers;;; Text Values

Here is an example of a number format code that uses all four sections:
`#,##0.00_);(#,##0.00);"-";"Enter a number"`

The code shows positive numbers with a comma separator for the thousands, two decimal places and aligns the number in the cell to allow for the width of a closing parenthesis so that positive and negative numbers in a column will line up precisely at the decimal point.

Negative values have a comma separator, two decimal places and are enclosed in parentheses. Zero values are shown as a dash. Any text entered into the cell is displayed as "Enter a number", regardless of the text entered.



To create a Custom Number Format, select **Home** tab → Click the **Number Format list arrow** → **More Number Formats**.

In the Category list, click **Custom** and in the *Type* box, enter the number format code required.

It is often useful to use an existing number format as a starting point for a new code.

Examine the *Sample* section to see the effect of the format codes as you enter them.

The custom number formats that you have created are always displayed at the end of the list of number formats in the *Custom* category.

In the illustration, the code being created rounds the display of all numbers to round millions to one decimal place and places the text "mil" at the end of the number.

The precision of the number in the cell is not changed in any way. The value in the cell is five hundred million but it appears as "500.0 mil".

Excel number formats are very flexible and it is usually possible to display a value in a cell in any way that is required by using the format codes in various combinations.

However, numeric values that are contained in formulas that return a text value to the cell are not affected by the number format of the cell and in these cases the formatting code has to be applied in the formula itself.

Number Format Codes.

Number Codes	Description
General	The General Number format.
0 (Zero)	Digit placeholder, displays insignificant zeros if a number has fewer digits than there are zeros in the format.
#	Digit placeholder, displays only significant digits and does not display insignificant zeros.
?	Digit placeholder, leaves a space for insignificant zeros so that the decimal points align but does not display them.
%	Multiplies by 100 and displays % after the number.
, (Comma)	Thousands separator. Scales the number by 1,000 when placed after a placeholder.
E+ E- e+ e-	Scientific notation.

Text Codes	Description
\$ - + / () :	These characters are displayed in the number.
\ <i>character</i>	Displays the character specified.
"Text"	Displays the text enclosed in quotation marks.
*	Repeats the next character in the format to fill the column width. Only one allowed per section. Used for alignment.
_ (Underscore)	Allows for the width of the next character.
@	Placeholder for text.

Date Codes	Description
M	Month as a number, 1 to 12.
MM	Month as a number with leading zeros, 01 to 12.
MMM	Month as an abbreviation, Jan to Dec.
MMMM	Month full name, January to December.
D	Day as a number, 1 to 31.
DD	Day as a number with leading zeros, 01 to 31.
DDD	Day as an abbreviation, Mon to Sun.
DDDD	Day full name, Monday to Sunday.
YY	Year as a two-digit number, for example 05.
YYYY	Year as a four-digit number, for example 2005

Time Codes	Description
H	Hours as a number, 0 to 23.
HH	Hours as a number with leading zeros, 00 to 23.
M	Minutes as a number, 0 to 59.

Mm	Minutes as a number with leading zeros, 0 to 59.
S	Seconds as a number, 0 to 59.
Ss	Seconds as a number with leading zeros, 0 to 59.
AM/PM am/pm	Time based on the 12 hour clock.

Miscellaneous Codes	Description
[Black] [Blue] [Cyan] [Green] [Magenta] [Red] [White] [Yellow] [Color <i>n</i>]	Codes to display characters in the specific colour. In the general colour code <i>n</i> is a number from 1 to 56 and specifies the <i>n</i> th colour in the active colour palette.
[<i>Condition Value</i>]	Condition is any comparative operator: =, >, <, >=, <= or <> and value is any number. The number format may contain up to two conditions.

