

Tables in context

The function of tables in web design is for the presentation of data. A table presents data so that it can be referenced in horizontal and vertical columns.

In the early 1990's, tables were adapted by designers in order to format content for the whole page. This was because there was no purpose made provision in the early specification of HTML for controlling page layout. The demands of designers also lead the providers of the main browsers at that time (Netscape and Internet Explorer) to produce their own adaptations to HTML in order to provide extra features for page styling.

These adaptations to HTML lead to two issues; incompatibility of code between browsers and the inclusion of styling as part of the mark-up language (HTML). Styling or design issues, apart from the most basic, were never intended to be part of HTML. The purpose of HTML is to place elements on the page. A third issue concerns accessibility. Layout with tables is less accessible for screen readers than using styles for layout.

These issues lead the World Wide Web Consortium to develop CSS to cater for the requirements of page styling. As part of this a method of page layout was developed through the use of <div> tags targeted by styles.

Tables are useful for controlling layout as part of the web design learning process. Pages created by tables look no different to those created with styles. Using tables for layout allows present learning about web design to be applied to a web page in a meaningful way. The alternative to this would be to learn the complexities of CSS first before being able to control page layout.

When using tables for layout it is advisable to keep the tables as simple as possible. Try to avoid dividing a table into many smaller cells. Instead use *nested tables* to create smaller cell divisions. This will help in the understanding of using CSS and the transition to using styles for control of page layout.

Inserting a table

Anyone that has used programmes such as Word or Excel will probably have an understanding of how tables work. Tables are created by deciding the number of columns and rows and the width. The width can be determined by pixels or percentage. The rows and columns create the sections of the table which are called cells. Often, the initial table does not fit the requirements of the page layout. After insertion, extra rows and columns can be added and cells split or merged.

To control layout with tables all page content should be within a table.

To insert a table place the cursor on the page where the table is to be inserted and go to Insert > Table, or click on the Insert Table button in the Common section of the Insert Panel.



This will open the Table dialogue.

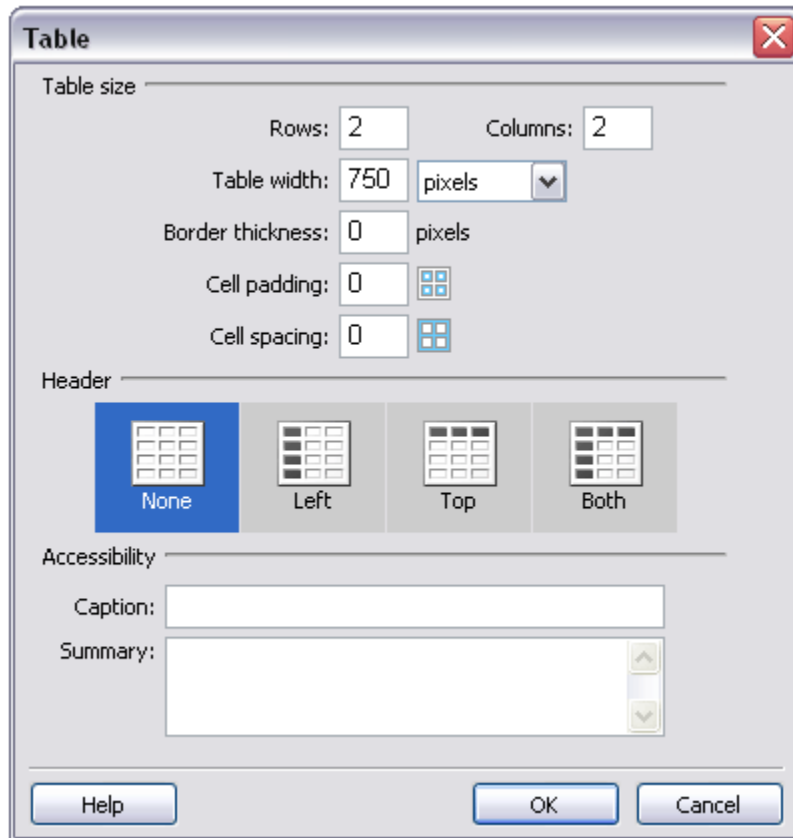


Table size

Enter the number of rows, columns and width required. The width allows fixed (pixels) or percentage widths. Until confidence is gained with using tables it is best to use fixed widths. Using percentage widths requires more experience because, for instance, they can cause the content to reorder depending on the size of the browser window.

Border thickness applies a border to the table. Generally, tables used for layout do not have visible borders. Borders can be added after insertion. Set to zero (0) if not required. A better way to create borders is to use CSS.

Cell padding creates spacing around the inside of all the table cells within a table so that content does not extend to the edge. Set to zero (0) if not required. This can be added after insertion. Padding for individual cells can also be created with CSS.

Cell spacing creates spacing between cells. This can be used to create an effect of borders around cells by using different background colours for the table and individual cells. Values applied to cell spacing impact upon column widths. Set to zero (0) if not required.

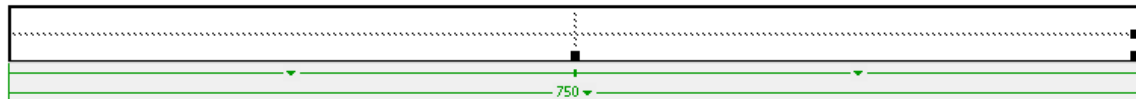
Header

Set this to None. Choosing one of the other options will centre and embolden text applied to the table cells as in the illustrations. These are for use in tables that contain data.

Accessibility

These options can be ignored when using tables for layout. Caption will place a visible caption on the page. Summary adds an attribute to the <table> tag in the code of the page. This can be a description of the table function.

Click OK and the table will appear on the page.



The table is highlighted and the properties for table formatting appear in the Properties inspector. The table will stretch down the page when content is added so do not pull the table down by the resize handles (small black squares). Table heights only need to be assigned in certain circumstances.

Appearing underneath the table is the Table Widths rule. This indicates the width of the table and any widths that are applied to the columns. This can be turned on or off by going to View > Visual Aids > Table Widths.

Table code

Go to Split view and look at the code for the table.

```
<table width="750" border="0" cellspacing="0" cellpadding="0">
  <tr>
    <td>&nbsp;</td>
    <td>&nbsp;</td>
  </tr>
  <tr>
    <td>&nbsp;</td>
    <td>&nbsp;</td>
  </tr>
</table>
```

The <table> tag contains attributes applied to the table.

<tr> denotes a table row.

<td> denotes a table cell (table data). DW places a non-breaking space inside the <td> tag to give it initial content. The cells would collapse without this making it difficult to place content in the cell in design view. When content is placed in the cell the non-breaking space is removed.

Tables and the Properties panel

The Properties panel displays two sets of content depending on whether the table is selected or the cursor is placed within a cell.

To select a table, click on the outline of the table.

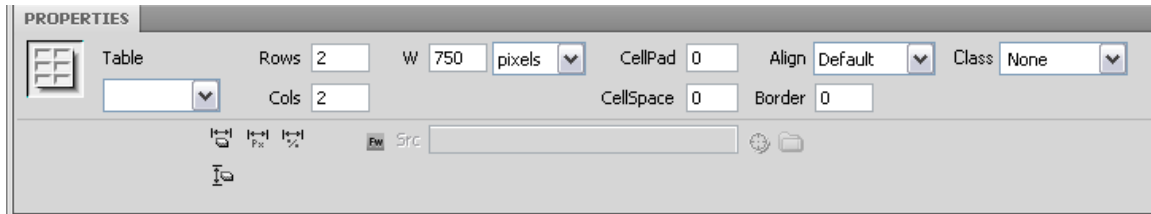
OR

In the tag selector at the bottom of the document window click on <table>.



You may need to place the cursor inside the table first.

Table Properties



Properties with table selected

Table - Use this to give the table an ID for targeting with CSS

Rows and **Columns** - Add or delete rows and columns

W - Table width

CellPad, **CellSpace**, **Border** - Values for cell padding, spacing and table border.

Align - Alignment of the table on the page. Choose Centre to centre the table on the page. Leave as default for left aligned layout.

Class - For selecting pre-defined class selector styles.

The bottom half of the Properties panel contains buttons for adjusting table measurements. Mouse over to reveal function.

Cell Properties

Content for cell properties are in the lower half of the Properties panel in both HTML and CSS views.

Cell - Two buttons for merging or splitting cells

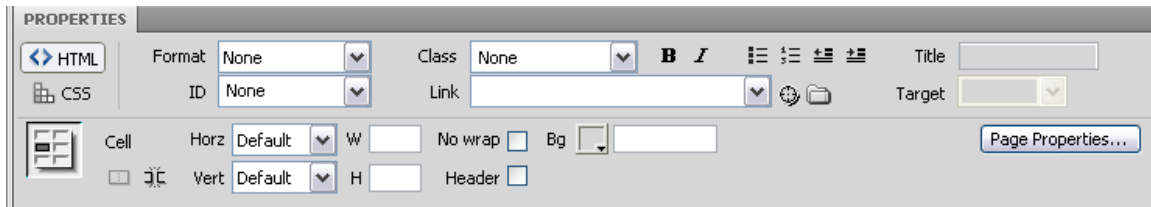
Horz and **Vert** - Content within a cell can be aligned with these options. By default, the content of a cell appears in the vertical middle. *This is an attribute of using tables for data entry.*

W and **H** - Enter values to assign cell width and height. *When setting widths for cells it is important that they add up to the total width of the table.*

No wrap - Choosing this will prevent the text wrapping in the cell. The text will stretch the cell.

Header - For use when recording tabular data. This will embolden and centre the text

Bg - Apply a background colour to a cell



Properties with cursor within a cell

Column widths

Change the widths by one of two methods:

1. Define the widths of the columns by placing the cursor over the dividing line between the cells and dragging to the desired position. This will enter the widths into the Table Widths rule and Properties panel.
2. Place the cursor in a cell and enter the width in the Properties panel. Ensure that all column widths add up to the total width of the table.

Aligning content

<p> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam posuere malesuada purus, id pharetra sapien vestibulum quis. Fusce ante tellus, mattis quis feugiat non, laoreet gravida eros. Nunc porta varius neque nec tristique. Nullam placerat dictum dui ac pulvinar. Mauris sed est eget nisl ornare posuere ac at felis. Fusce porttitor vulputate tristique. Nulla vehicula vestibulum ornare. </p>	<p> estibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque consequat ante sit amet nibh ultricies sed feugiat nisl dapibus. </p>
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The cell on the right has its content positioned in the vertical centre. This is the default alignment of content within a cell. The cell on the left appears to have the content positioned to the top. This is because this cell contains more content and the cell has stretched to accommodate and therefore established the height or the row.

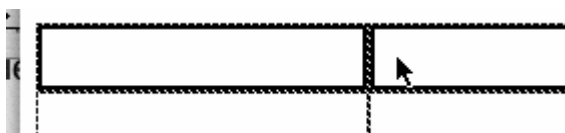
Click in the cell with less content and under *Vert* in the Properties choose Top. The content of cells can be aligned independently of each other.

Splitting cells

Place the cursor into a cell. In the Properties panel under Cell, click on the Split Cell button. This opens a window allowing you to divide the cell as required.

Merging cells

The cells to be merged need to be highlighted first. A highlighted cell has its outline emboldened.



Do this by clicking and dragging across the cells or Ctrl (PC) or Shift (Mac) clicking on the cells. In the Properties panel under Cell, click on the Merge Cells button. The cells will now become one.

Nested tables

A nested table is one that is placed inside another table. A typical reason for this

is where a cell needs to be divided into smaller parts. Instead of dividing the cell a nested table is used instead. There are two reasons for this:

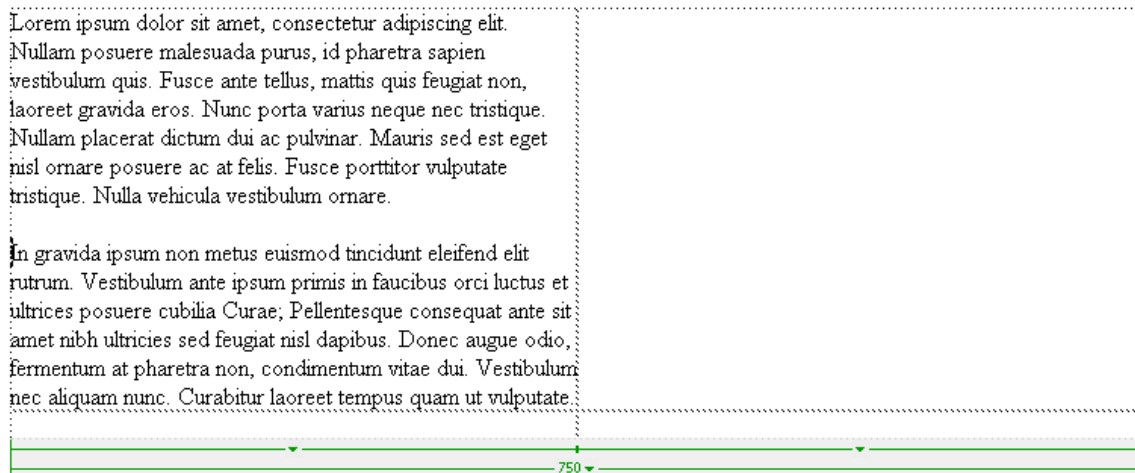
1. The nested table can be formatted independently of the host table
2. Dividing a cell into many smaller parts can impact on the sizing of rows and columns in the table.

To insert a nested table, click inside the cell where the table is to be placed. Insert table as outlined above and enter desired rows and columns. *In Table width put in either the width of the host cell or a percentage such as 100%.* Using either of these will ensure the nested table does not stretch the host cell.

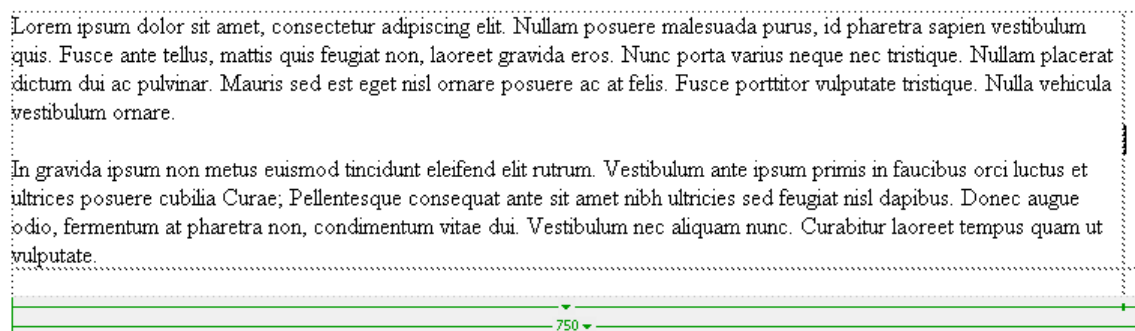
Placing content into a table

This is an introduction to adding content to a table without prior formatting such as cell widths, split, merged cells or nested tables. Normally the procedure would entail doing much of the formatting of a table prior to insertion of content. The formatting would be dictated by the requirements of the design.

In design view, click inside the first cell and add desired content such as text, images and any other content. All text and image formatting procedures apply as normal.



Click inside the next cell and continue to add content. The cell will collapse if column widths have not been assigned.



Place content in this cell and the cell will expand to accommodate.

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam posuere malesuada purus, id pharetra sapien vestibulum quis. Fusce ante tellus, mattis quis feugiat non, laoreet gravida eros. Nunc porta varius neque nec tristique. Nullam placerat dictum dui ac pulvinar. Mauris sed est eget nisl ornare posuere ac at felis. Fusce porttitor vulputate tristique. Nulla vehicula vestibulum ornare.</p> <p>In gravida ipsum non metus euismod tincidunt eleifend elit rutrum. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque consequat ante sit amet nibh ultricies sed feugiat nisl dapibus. Donec augue odio, fermentum at pharetra non, condimentum vitae dui. Vestibulum nec aliquam nunc. Curabitur laoreet tempus quam ut vulputate.</p>	<p>estibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Pellentesque consequat ante sit amet nibh ultricies sed feugiat nisl dapibus. Donec augue odio, fermentum at pharetra non, condimentum vitae dui. Vestibulum nec aliquam nunc. Curabitur laoreet tempus quam ut vulputate.</p>
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Assign column widths as required.

Percentage width tables

Percentage width tables are a little more complex to implement as widths are dependent upon the size of the browser window. This can impact on content by re-ordering it in undesirable ways.

A layout like this seldom uses percentage widths alone. It is often combined with fixed width elements as well. This helps to maintain order in areas where it is necessary.

The illustration below shows a typical use of percentage width and fixed width tables. Note that it uses more than one table to achieve the layout.

The screenshot shows a browser window with a table layout. The table consists of two main sections:

- Top Section:** A table with two columns. The left column is labeled "Percentage width table" and the right column is labeled "This width of this cell is 200px".
- Bottom Section:** A table with two columns. The left column is labeled "This table is fixed width - 750px" and the right column is labeled "This width of this cell is 200px".

The content within the bottom section's right column is split into two paragraphs of Lorem Ipsum text.

The table at the top is set to 100% and has two columns. The right-hand column/cell width is set to 200px. The left-hand cell size will then be determined by the amount of the remaining space available (there is no need to specify the size for this cell). Making the cell on the right fixed in width would be a way to define an area suitable for a graphic such as a logo or other element that requires a specific space. Content in the left cell can be left to float within the remaining space. The lower table is a normal fixed width one.

This layout gives the impression that it utilizes the full width of the browser window whilst controlling layout of elements within.

Using more than one table

Tables can be stacked up on the page as in the percentage width example above. After inserting one table, click in the space beneath and insert a second table. The cursor will flash down the right hand side of the first table but the second table will position itself below.

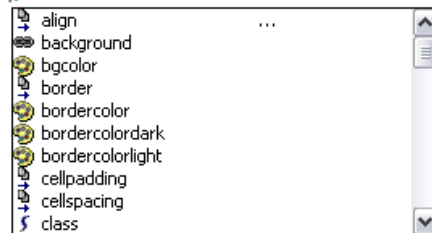
Using this method has two advantages:

1. It enables greater simplification of table structure
2. Individual tables can be formatted independently of each other

Changing the background colour of a table

The Properties panel does not provide an option to do this. This can be done in the code. In the opening `<table>` tag insert a space after the last entry. A code selector box will appear. Select *bgcolor* from the list.

```
<table width="750" border="0" cellspacing="0" cellpadding="0" |>
  <tr>
    <td>&nbsp;</td>
    <td>&nbsp;</td>
  </tr>
  <tr>
    <td>&nbsp;</td>
    <td>&nbsp;</td>
  </tr>
</table>
```



This will complete the code and a colour palette will appear allowing a colour to be selected.