

# Inheriting properties from table row and column

Inheriting property values from an `<fo:table-row>` to an `<fo:table-cell>` is simple, and inheriting property values from an `<fo:table-column>` to an `<fo:table-cell>` is only slightly more complicated. `<fo:table-row>` contains one or more `<fo:table-cell>`, so the normal XSL-FO rules for property inheritance apply. `<fo:table-column>` is an empty element and, obviously, is not an ancestor of `<fo:table-cell>`. However, any inherited property can be specified on an `<fo:table-column>` and used by the `<fo:table-cell>` (or any of its descendants) in that column by specifying ‘`from-table-column()`’ as the property’s value on the FO. Specifying ‘`from-table-column()`’ returns the inherited value of the current property. Also specifying a property name (for example, `color="from-table-column(background-color)"`) returns the inherited value of the named property.

When, for example, a table requires a different font-weight or a different color in each column, it can be simpler to specify these on the `<fo:table-column>` than to keep track of the column number of each `<fo:table-cell>` in order to specify the correct values on each `<fo:table-cell>` individually.

In the following table, Row 1 inherits the value of the `<fo:table-row>` property to `<fo:table-cell>`. From Row 2 onwards, `<fo:table-cell>` uses ‘`from-table-column()`’ to inherit properties such as character thickness, size, and color of `<fo:table-column>` in each column.

Row 1, column 1	Row 1, column 2	Row 1, column 3	Row 1, column 4
Row 2, column 1	Row 2, column 2	Row 2, column 3	Row 2, column 4
Row 3, column 1	Row 3, column 2	Row 3, column 3	Row 3, column 4
Row 4, column 1	Row 4, column 2	Row 4, column 3	Row 4, column 4
Row 5, column 1	Row 5, column 2	Row 5, column 3	Row 5, column 4

Note that ‘`background-color`’ and some related properties, when specified on `<fo:table-row>` or `<fo:table-column>` (or `<fo:table>`, `<fo:table-header>`, `<fo:table-body>`, or `<fo:table-footer>`), apply to background areas that are generated **behind** the areas generated by the `<fo:table-cell>`.

The inherited value of a property that applies to `<fo:table-column>` can still be returned by ‘`from-table-column()`’ to set the value of the same property, or of a different property, on an `<fo:table-cell>` or its descendants. Unlike other Rows, Row 4 has swapped background and text colors. This is because the value of ‘`background-color`’ in `<fo:table-column>` is inherited to the ‘`color`’ of `<fo:table-cell>` by specifying `color="from-table-column(background-color)"`, and the value of ‘`color`’ in `<fo:table-column>` is inherited to ‘`background-color`’ in `<fo:table-cell>` by specifying `background-color="from-table-column(color)"`.