### [shd](shd.docx) (Table Shading Exception)

This element specifies the shading which shall be applied to all cells in the current row as part of a set of table-level property exceptions. Similarly to paragraph shading, this shading shall be applied to the contents of the [tab](tab.docx) up to the [table](table.docx) borders, regardless of the presence of text - unlike cell shading, [table](table.docx) shading shall include any cell padding. This property shall be superseded by any cell-level shading on any cell in this row (§).

This shading consists of three components:

* Background Color
* (optional) Pattern
* (optional) Pattern Color

The resulting shading is applied by setting the [background](background.docx) [color](color.docx) behind the paragraph, then applying the pattern [color](color.docx) using the mask supplied by the pattern over that background.

If this element is omitted, then the cell shading shall be determined by the table-level cell shading settings (§) for the current table.

[Example: Consider a [table](table.docx) in which the final two rows have a set of table-level property exceptions giving them theme [color](color.docx) shading in the background2 theme [color](color.docx), as follows:

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This table-level shading exception would be specified using the following WordprocessingML:

<w:[tblPrEx](tblPrEx.docx)>

 <w:[jc](jc.docx) w:val="[left](left.docx)" />

 <w:[shd](shd.docx) w:val="clear" w:[color](color.docx)="auto" w:fill="EEECE1" w:themeFill="background2" />

</w:[tblPrEx](tblPrEx.docx)>

The [shd](shd.docx) element specifies cell shading with a clear pattern using a [background](background.docx) theme [color](color.docx) of background2. end example]

|  |
| --- |
| Parent Elements |
| [tblPrEx](tblPrEx.docx) (§); [tblPrEx](tblPrEx.docx) (§) |

|  |  |
| --- | --- |
| Attributes | Description |
| [color](color.docx) (Shading Pattern Color) | Specifies the [color](color.docx) used for any foreground pattern specified for this shading using the val attribute.This [color](color.docx) may either be presented as a hex value (in RRGGBB format), or auto to allow a consumer to automatically determine the foreground shading [color](color.docx) as appropriate.If the shading style (the val attribute) specifies the use of no shading [format](format.docx) or is omitted, then this property has no effect. Also, if the shading specifies the use of a theme [color](color.docx) via the themeColor attribute, then this value is superseded by the theme [color](color.docx) value.If this attribute is omitted, then its value shall be assumed to be auto.[Example: Consider a shading of [type](type.docx) pct20 with a foreground [color](color.docx) value of auto, as follows:<w:[shd](shd.docx) w:val="pct20"... w:[color](color.docx)="auto"/>The foreground [color](color.docx) for this shading pattern therefore may be automatically be modified by a consumer as appropriate, for example, in order to ensure that the shading [color](color.docx) can be distinguished against the page's [background](background.docx) color. end example]The possible values for this attribute are defined by the [ST\_HexColor](ST_HexColor.docx) simple [type](type.docx) (§). |
| fill (Shading Background Color) | Specifies the [color](color.docx) used for the [background](background.docx) for this shading.This [color](color.docx) may either be presented as a hex value (in RRGGBB format), or auto to allow a consumer to automatically determine the [background](background.docx) shading [color](color.docx) as appropriate.If this attribute is omitted, then its value shall be assumed to be auto.[Example: Consider a shading using a [background](background.docx) [color](color.docx) of hex value C3D69B, using the following WordprocessingML:<w:[shd](shd.docx) w:fill="C3D69B" />The [background](background.docx) [color](color.docx) for this shading therefore will be a [color](color.docx) with a hex value of C3D69B. end example]If the shading specifies the use of a theme [color](color.docx) via the themeFill attribute, then this value is superseded by the theme [color](color.docx) value.The possible values for this attribute are defined by the [ST\_HexColor](ST_HexColor.docx) simple [type](type.docx) (§). |
| themeColor (Shading Pattern Theme Color) | Specifies a theme [color](color.docx) which should be applied to any foreground pattern specified for this shading using the val attribute.The specified theme [color](color.docx) is a reference to one of the predefined theme colors, located in the document's themes part, which allows for [color](color.docx) information to be set centrally in the document.If this element is omitted, then no theme [color](color.docx) is applied, and the [color](color.docx) attribute shall be used to determine the shading pattern color.[Example: Consider a paragraph which shall have a [background](background.docx) consisting of a theme [color](color.docx) accent3 with a theme [color](color.docx) accent6 overlaid using a 20% fill pattern. This requirement is specified using the following WordprocessingML:<w:[pPr](pPr.docx)> <w:[shd](shd.docx) w:val="pct20" w:themeColor="accent6" w:themeFill="accent3" /> </w:[pPr](pPr.docx)>The resulting paragraph will use the foreground pattern [color](color.docx) accent6 in the region specified by the pct20 pattern mask. end example]The possible values for this attribute are defined by the [ST\_ThemeColor](ST_ThemeColor.docx) simple [type](type.docx) (§). |
| themeFill (Shading Background Theme Color) | Specifies a theme [color](color.docx) which should be applied to the [background](background.docx) for this shading.The specified theme [color](color.docx) is a reference to one of the predefined theme colors, located in the document's themes part, which allows for [color](color.docx) information to be set centrally in the document.If this element is omitted, then no theme [color](color.docx) is applied, and the [color](color.docx) attribute shall be used to determine the shading [background](background.docx) color.[Example: Consider a paragraph which shall have a [background](background.docx) consisting of a theme [color](color.docx) accent3 with a theme [color](color.docx) accent6 overlaid using a 20% fill pattern. This requirement is specified using the following WordprocessingML:<w:[shd](shd.docx) w:val="pct20" w:themeColor="accent6" w:themeFill="accent3" /> The resulting shading will use the [background](background.docx) [color](color.docx) specified by the accent3 theme color. end example]The possible values for this attribute are defined by the [ST\_ThemeColor](ST_ThemeColor.docx) simple [type](type.docx) (§). |
| themeFillShade (Shading Background Theme Color Shade) | Specifies the shade value applied to the supplied theme [color](color.docx) (if any) for this shading color.If the themeFillShade is supplied, then it is applied to the RGB value of the themeFill [color](color.docx) (from the theme part) to determine the final [color](color.docx) applied to this border.The themeFillShade value is stored as a hex [encoding](encoding.docx) of the shade value (from 0 to 255) applied to the current border.[Example: Consider a shade of 40% applied to a [background](background.docx) shading [color](color.docx) in a document. This shade is calculated as follows:The resulting themeFillShade value in the file [format](format.docx) would be 66. end example]Given an RGB [color](color.docx) defined as three hex values in RRGGBB [format](format.docx), the shade is applied as follows:* Convert the [color](color.docx) to the HSL [color](color.docx) [format](format.docx) (values from 0 to 1)
* Modify the luminance factor as follows:
* Convert the resultant HSL [color](color.docx) to RGB

[Example: Consider a document with a [background](background.docx) using the accent2 theme [color](color.docx), whose RGB value (in RRGGBB hex format) is C0504D.The equivalent HSL [color](color.docx) value would be. Applying the shade formula with a shade percentage of 75% to the luminance, we get:Taking the resulting HSL [color](color.docx) value of and converting back to RGB, we get 943634.This transformed value can be seen in the resulting shading's fill attribute:<w:[shd](shd.docx) w:fill="943634" w:themeFill="accent2" w:themeFillShade="BF" />end example]The possible values for this attribute are defined by the [ST\_UcharHexNumber](ST_UcharHexNumber.docx) simple [type](type.docx) (§). |
| themeFillTint (Shading Background Theme Color Tint) | Specifies the tint value applied to the supplied theme [color](color.docx) (if any) for this shading instance.If the themeFillTint is supplied, then it is applied to the RGB value of the themeFill [color](color.docx) (from the theme part) to determine the final [color](color.docx) applied to this border.The themeFillTint value is stored as a hex [encoding](encoding.docx) of the tint value (from 0 to 255) applied to the current border.[Example: Consider a tint of 60% applied to a border in a document. This tint is calculated as follows:The resulting themeFillTint value in the file [format](format.docx) would be 99. end example]Given an RGB [color](color.docx) defined as three hex values in RRGGBB [format](format.docx), the shade is applied as follows:* Convert the [color](color.docx) to the HSL [color](color.docx) [format](format.docx) (values from 0 to 1)
* Modify the luminance factor as follows:
* Convert the resultant HSL [color](color.docx) to RGB

[Example: Consider a document with a [background](background.docx) using the accent2 theme [color](color.docx), whose RGB value (in RRGGBB hex format) is 4F81BD.The equivalent HSL [color](color.docx) value would be. Applying the tint formula with a tint percentage of 60% to the luminance, we get:Taking the resulting HSL [color](color.docx) value of and converting back to RGB, we get 95B3D7.This transformed value can be seen in the resulting shading's fill attribute:<w:top w:val="single" w:[sz](sz.docx)="4" w:space="24"  w:fill="95B3D7" w:themeFillColor="accent2"  w:themeFillTint="99" />end example]The possible values for this attribute are defined by the [ST\_UcharHexNumber](ST_UcharHexNumber.docx) simple [type](type.docx) (§). |
| themeShade (Shading Pattern Theme Color Shade) | Specifies the shade value applied to the supplied theme [color](color.docx) (if any) for this shading color.If the themeShade is supplied, then it is applied to the RGB value of the themeColor [color](color.docx) (from the theme part) to determine the final [color](color.docx) applied to this border.The themeShade value is stored as a hex [encoding](encoding.docx) of the shade value (from 0 to 255) applied to the current border.[Example: Consider a shade of 40% applied to a [background](background.docx) shading [color](color.docx) in a document. This shade is calculated as follows:Te resulting themeShade value in the file [format](format.docx) would be 66. end example]Given an RGB [color](color.docx) defined as three hex values in RRGGBB [format](format.docx), the shade is applied as follows:* Convert the [color](color.docx) to the HSL [color](color.docx) [format](format.docx) (values from 0 to 1)
* Modify the luminance factor as follows:
* Convert the resultant HSL [color](color.docx) to RGB

[Example: Consider a document with a [background](background.docx) using the accent2 theme [color](color.docx), whose RGB value (in RRGGBB hex format) is C0504D.The equivalent HSL [color](color.docx) value would be. Applying the shade formula with a shade percentage of 75% to the luminance, we get:Taking the resulting HSL [color](color.docx) value of and converting back to RGB, we get 943634.This transformed value can be seen in the resulting background's [color](color.docx) attribute:<w:[shd](shd.docx) w:[color](color.docx)="943634" w:themeColor="accent2" w:themeShade="BF" />end example]The possible values for this attribute are defined by the [ST\_UcharHexNumber](ST_UcharHexNumber.docx) simple [type](type.docx) (§). |
| themeTint (Shading Pattern Theme Color Tint) | Specifies the tint value applied to the supplied theme [color](color.docx) (if any) for this shading instance.If the themeTint is supplied, then it is applied to the RGB value of the themeColor [color](color.docx) (from the theme part) to determine the final [color](color.docx) applied to this border.The themeTint value is stored as a hex [encoding](encoding.docx) of the tint value (from 0 to 255) applied to the current border.[Example: Consider a tint of 60% applied to a border in a document. This tint is calculated as follows:The resulting themeTint value in the file [format](format.docx) would be 99. end example]Given an RGB [color](color.docx) defined as three hex values in RRGGBB [format](format.docx), the shade is applied as follows:* Convert the [color](color.docx) to the HSL [color](color.docx) [format](format.docx) (values from 0 to 1)
* Modify the luminance factor as follows:
* Convert the resultant HSL [color](color.docx) to RGB

[Example: Consider a document with a [background](background.docx) using the accent2 theme [color](color.docx), whose RGB value (in RRGGBB hex format) is 4F81BD.The equivalent HSL [color](color.docx) value would be. Applying the tint formula with a tint percentage of 60% to the luminance, we get:Taking the resulting HSL [color](color.docx) value of and converting back to RGB, we get 95B3D7.This transformed value can be seen in the resulting shading's [color](color.docx) attribute:<w:[shd](shd.docx) w:[color](color.docx)="95B3D7" w:themeColor="accent2"  w:themeTint="99" />end example]The possible values for this attribute are defined by the [ST\_UcharHexNumber](ST_UcharHexNumber.docx) simple [type](type.docx) (§). |
| val (Shading Pattern) | Specifies the pattern which shall be used to lay the pattern [color](color.docx) over the [background](background.docx) [color](color.docx) for this paragraph shading.This pattern consists of a mask which is applied over the [background](background.docx) shading [color](color.docx) to get the locations where the pattern [color](color.docx) should be shown. Each of these possible masks are shown in the simple [type](type.docx) values referenced below.[Example: Consider a shaded paragraph which uses a 10 percent foreground fill, resulting in the following WordprocessingML:<w:[shd](shd.docx) w:val="pct10" .../>This shading val is pct10, indicating that the border style is a 10 percent foreground fill mask. end example]The possible values for this attribute are defined by the [ST\_Shd](ST_Shd.docx) simple [type](type.docx) (§). |

The following [XML](XML.docx) Schema fragment defines the contents of this element:

<complexType [name](name.docx)="CT\_Shd">

 <attribute [name](name.docx)="val" [type](type.docx)="[ST\_Shd](ST_Shd.docx)" use="required"/>

 <attribute [name](name.docx)="[color](color.docx)" [type](type.docx)="[ST\_HexColor](ST_HexColor.docx)" use="optional"/>

 <attribute [name](name.docx)="themeColor" [type](type.docx)="[ST\_ThemeColor](ST_ThemeColor.docx)" use="optional"/>

 <attribute [name](name.docx)="themeTint" [type](type.docx)="[ST\_UcharHexNumber](ST_UcharHexNumber.docx)" use="optional"/>

 <attribute [name](name.docx)="themeShade" [type](type.docx)="[ST\_UcharHexNumber](ST_UcharHexNumber.docx)" use="optional"/>

 <attribute [name](name.docx)="fill" [type](type.docx)="[ST\_HexColor](ST_HexColor.docx)" use="optional"/>

 <attribute [name](name.docx)="themeFill" [type](type.docx)="[ST\_ThemeColor](ST_ThemeColor.docx)" use="optional"/>

 <attribute [name](name.docx)="themeFillTint" [type](type.docx)="[ST\_UcharHexNumber](ST_UcharHexNumber.docx)" use="optional"/>

 <attribute [name](name.docx)="themeFillShade" [type](type.docx)="[ST\_UcharHexNumber](ST_UcharHexNumber.docx)" use="optional"/>

</complexType>