Apache FOP Compliance Page

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1. W3C XSL-FO 1.0 Standard

One of FOP's design goals is conformance to the [W3C XSL-FO 1.0 standard](#), which specifies three levels of "conformance": basic, extended, and complete. Although FOP does not currently conform to any of these levels, it is nevertheless a useful work-in-progress for many applications. The information presented here demonstrates FOP's progress toward the goal of conformance, which progress consists of implementation of specific objects and properties in the standard. The information presented is useful not only to the developers as a sort of "to do" list, but also for setting proper expectations for users and potential users.

In the tables below, "yes" (green background) indicates conformance, "no" (red background) indicates a lack of conformance, "partial" (greyish background) indicates partial conformance, and "na" indicates that the item is "not applicable" to FOP usually because FOP supports only visual media.

1.1. XSL-FO Object Support

- **Declarations and Pagination and Layout Formatting Objects**: root, declarations, color-profile, page-sequence, layout-master-set, page-sequence-master, single-page-master-reference, repeatable-page-master-reference, repeatable-page-master-alternatives, conditional-page-master-reference, simple-page-master, region-body, region-before, region-after, region-start, region-end, flow, static-content, title
- **Block Formatting Objects**: block, block-container
- **Inline Formatting Objects**: bidi-override, character, initial-property-set, external-graphic, instream-foreign-object, inline, inline-container, leader, page-number, page-number-citation
- **Table Formatting Objects**: table-and-caption, table, table-column, table-caption, table-header, table-footer, table-body, table-row, table-cell
- **List Formatting Objects**: list-block, list-item, list-item-body, list-item-label
- **Link and Multi Formatting Objects**: basic-link, multi-switch, multi-case, multi-toggle, multi-properties, multi-property-set
- **Formatting Objects for Bookmarks**: bookmark-tree, bookmark, bookmark-title
- **Out-of-line Formatting Objects**: float, footnote, footnote-body
- **Other Formatting Objects**: wrapper, marker, retrieve-marker

1.2. XSL-FO Property Support

- **Common Accessibility Properties**: source-document, role
- **Common Absolute Position Properties**: absolute-position, top, right, bottom, left
- **Common Aural Properties**: azimuth, cue-after, cue-before, elevation, pause-after,

pause-before, pitch, pitch-range, play-during, richness, speak, speak-header, speak-numeral, speak-punctuation, speech-rate, stress, voice-family, volume

- **Common Border, Padding, and Background Properties:** background-attachment, background-color, background-image, background-repeat, background-position-horizontal, background-position-vertical, border-before-color, border-before-style, border-before-width, border-after-color, border-after-style, border-after-width, border-start-color, border-start-style, border-start-width, border-end-color, border-end-style, border-end-width, border-top-color, border-top-style, border-top-width, border-bottom-color, border-bottom-style, border-bottom-width, border-left-color, border-left-style, border-left-width, border-right-color, border-right-style, border-right-width, padding-before, padding-after, padding-start, padding-end, padding-top, padding-bottom, padding-left, padding-right
- **Common Font Properties:** font-family, font-selection-strategy, font-size, font-stretch, font-size-adjust, font-style, font-variant, font-weight
- **Common Hyphenation Properties:** country, language, script, hyphenate, hyphenation-character, hyphenation-push-character-count, hyphenation-remain-character-count
- **Common Margin Properties - Block:** margin-top, margin-bottom, margin-left, margin-right, space-before, space-after, start-indent, end-indent
- **Common Margin Properties - Inline:** space-end, space-start
- **Common Relative Position Properties:** relative-position
- **Area Alignment Properties:** alignment-adjust, alignment-baseline, baseline-shift, display-align, dominant-baseline, relative-align
- **Area Dimension Properties:** block-progression-dimension, content-height, content-width, height, inline-progression-dimension, max-height, max-width, min-height, min-width, scaling, scaling-method, width
- **Block and Line-related Properties:** hyphenation-keep, hyphenation-ladder-count, last-line-end-indent, line-height, line-height-shift-adjustment, line-stacking-strategy, linefeed-treatment, white-space-treatment, text-align, text-align-last, text-indent, white-space-collapse, wrap-option
- **Character Properties:** character, letter-spacing, suppress-at-line-break, text-decoration, text-shadow, text-transform, treat-as-word-space, word-spacing
- **Color-related Properties:** color, color-profile-name, rendering-intent
- **Float-related Properties:** clear, float, intrusion-displace
- **Keeps and Breaks Properties:** break-after, break-before, keep-together, keep-with-next, keep-with-previous, orphans, widows
- **Layout-related Properties:** clip, overflow, reference-orientation, span
- **Leader and Rule Properties:** leader-alignment, leader-pattern, leader-pattern-width, leader-length, rule-style, rule-thickness
- **Properties for Dynamic Effects Formatting Objects:** active-state, auto-restore, case-name,

case-title, destination-placement-offset, external-destination, indicate-destination, internal-destination, show-destination, starting-state, switch-to, target-presentation-context, target-processing-context, target-stylesheet
- **Properties for Markers:** marker-class-name, retrieve-class-name, retrieve-position, retrieve-boundary
- **Properties for Number to String Conversion:** format, grouping-separator, grouping-size, letter-value
- **Pagination and Layout Properties:** blank-or-not-blank, column-count, column-gap, extent, flow-name, force-page-count, initial-page-number, master-name, master-reference, maximum-repeats, media-usage, odd-or-even, page-height, page-position, page-width, precedence, region-name
- **Table Properties:** border-after-precedence, border-before-precedence, border-collapse, border-end-precedence, border-separation, border-start-precedence, caption-side, column-number, column-width, empty-cells, ends-row, number-columns-repeated, number-columns-spanned, number-rows-spanned, starts-row, table-layout, table-omit-footer-at-break, table-omit-header-at-break
- **Writing-mode-related Properties:** direction, glyph-orientation-horizontal, glyph-orientation-vertical, text-altitude, text-depth, unicode-bidi, writing-mode
- **Miscellaneous Properties:** content-type, id, provisional-label-separation, provisional-distance-between-starts, ref-id, score-spaces, src, visibility, z-index
- **Shorthand Properties:** background, background-position, border, border-bottom, border-color, border-left, border-right, border-style, border-spacing, border-top, border-width, cue, font, margin, padding, page-break-after, page-break-before, page-break-inside, pause, position, size, vertical-align, white-space, xml:lang

1.3. XSL-FO Core Function Library Support

- **Number Functions:** floor, ceiling, round, min, max, abs
- **Color Functions:** rgb, rgb-icc, system-color
- **Font Functions:** system-font
- **Property Value Functions:** inherited-property-value, label-end, body-start, from-parent, from-nearest-specified-value, from-table-column, proportional-column-width, merge-property-values

2. XSL-FO Object Support Table (§6)

The following is a summary of FOP's current support for the standard XSL-FO objects.

Object Name	XSL-FO Conformance Level	Citation	Support in FOP		Comments
			0.20.5 (previous)	0.93 (stable)	
Declarations and Pagination and Layout Formatting Objects (§6.4)					
root	Basic	§6.4.2	yes	yes	
declarations	Basic	§6.4.3	no	no	
color-profile	Extended	§6.4.4	no	no	
page-sequence	Basic	§6.4.5	yes	yes	
layout-master-s	Basic	§6.4.6	yes	yes	
page-sequence-	Basic	§6.4.7	yes	yes	
single-page-ma:	Basic	§6.4.8	yes	yes	
repeatable-page	Basic	§6.4.9	yes	yes	
repeatable-page	Extended	§6.4.10	yes	yes	
conditional-page	Extended	§6.4.11	yes	yes	
simple-page-ma	Basic	§6.4.12	yes	partial	• [0.93] The page width may not change among pages of the same page-sequence unless a forced break is inserted.
region-body	Basic	§6.4.13	yes	yes	
region-before	Extended	§6.4.14	yes	yes	
region-after	Extended	§6.4.15	yes	yes	
region-start	Extended	§6.4.16	yes	yes	
region-end	Extended	§6.4.17	yes	yes	
flow	Basic	§6.4.18	yes	yes	

static-content	Extended	§6.4.19	yes	yes	
title	Extended	§6.4.20	no	no	
Block Formatting Objects (§6.5)					
block	Basic	§6.5.2	yes	yes	
block-container	Extended	§6.5.3	partial	partial	• [0.20.5] Currently only works as direct child of fo:flow. • [0.20.5] For absolute positioning, use 'position="absolute"' (as 'absolute-position="absolute"' is not implemented), and specify all four of "left", "top", "width" and "height" • [0.93] No known restrictions.
Inline Formatting Objects (§6.6)					
bidi-override	Extended	§6.6.2	no	no	
character	Basic	§6.6.3	yes	yes	
initial-property-s	Extended	§6.6.4	no	no	
external-graphic	Basic	§6.6.5	yes	yes	
instream-foreign	Extended	§6.6.6	yes	yes	• Built-in support for SVG only, additional namespaces through

					optional extensions.
inline	Basic	§6.6.7	yes	yes	
inline-container	Extended	§6.6.8	no	no	
leader	Basic	§6.6.9	partial	yes	
page-number	Basic	§6.6.10	yes	yes	
page-number-ci	Extended	§6.6.11	partial	partial	• [0.20.5] Only works for table of contents without any problems. The case where the page number doesn't fit on a line isn't handled, and any text on the same line and after the page-number might not appear exactly where you want it to. • [0.93] After the page number is known, no relayout is performed. The appearance may be suboptimal depending on the use case.

Table Formatting Objects (§6.7)					
table-and-caption	Basic	§6.7.2	no	no	
table	Basic	§6.7.3	partial	partial	• [0.93] Only border-collapse="separate" is supported and there's no support for automatic column widths.
table-column	Basic	§6.7.4	partial	yes	• [0.20.5] You must explicitly specify column widths.
table-caption	Extended	§6.7.5	no	no	
table-header	Basic	§6.7.6	yes	yes	
table-footer	Extended	§6.7.7	yes	yes	
table-body	Basic	§6.7.8	yes	yes	
table-row	Basic	§6.7.9	yes	yes	
table-cell	Basic	§6.7.10	partial	yes	• [0.20.5] must contain block-level FOs (cannot contain straight character data)
List Formatting Objects (§6.8)					
list-block	Basic	§6.8.2	yes	yes	
list-item	Basic	§6.8.3	yes	yes	

list-item-body	Basic	§6.8.4	yes	yes	
list-item-label	Extended	§6.8.5	yes	yes	
Link and Multi Formatting Objects (§6.9)					
basic-link	Extended	§6.9.2	yes	yes	• both internal and external supported
multi-switch	Extended	§6.9.3	no	no	
multi-case	Basic	§6.9.4	no	no	
multi-toggle	Extended	§6.9.5	no	no	
multi-properties	Extended	§6.9.6	no	no	
multi-property-s	Extended	§6.9.7	no	no	
Formatting Objects for Bookmarks (§6.11 in XSL 1.1 WD)					
bookmark-tree (since XSL 1.1)	Extended	§6.11.1 in XSL 1.1 WD	no	yes	• [0.20.5] Uses the proprietary fox:outline extension.
bookmark (since XSL 1.1)	Extended	§6.11.2 in XSL 1.1 WD	no	yes	• [0.20.5] Uses the proprietary fox:outline extension.
bookmark-title (since XSL 1.1)	Extended	§6.11.3 in XSL 1.1 WD	no	yes	• [0.20.5] Uses the proprietary fox:outline extension.
Out-of-line Formatting Objects (§6.10)					
float	Extended	§6.10.2	no	no	
footnote	Extended	§6.10.3	yes	partial	• [0.93] Restrictions with multi-column

					documents.
footnote-body	Extended	§6.10.4	yes	yes	
Other Formatting Objects (§6.11)					
wrapper	Basic	§6.11.2	yes	partial	• [0.93] Only works as expected with inline-level content.
marker	Extended	§6.11.3	yes	yes	
retrieve-marker	Extended	§6.11.4	yes	yes	

3. XSL-FO Property Support Table (§7)

The following is a summary of FOP's current support for the standard XSL-FO properties.

Property Name	XSL-FO Conformance Level	Citation	Support in FOP		Comments
			0.20.5 (previous)	0.93 (stable)	
Common Accessibility Properties (§7.4)					
source-docume	Basic	§7.4.1	na	na	
role	Basic	§7.4.2	na	na	
Common Absolute Position Properties (§7.5)					
absolute-positio	Complete	§7.5.1	no	yes	• [0.20.5] Use shorthand position="absolute" as a workaround. • [0.93] No restrictions. The 0.20.5 work-around is not supported.

top	Extended	§7.5.2	yes	yes	
right	Extended	§7.5.3	yes	yes	
bottom	Extended	§7.5.4	yes	yes	
left	Extended	§7.5.5	yes	yes	
Common Aural Properties (§7.6)					
azimuth	Basic	§7.6.1	na	na	
cue-after	Basic	§7.6.2	na	na	
cue-before	Basic	§7.6.3	na	na	
elevation	Basic	§7.6.4	na	na	
pause-after	Basic	§7.6.5	na	na	
pause-before	Basic	§7.6.6	na	na	
pitch	Basic	§7.6.7	na	na	
pitch-range	Basic	§7.6.8	na	na	
play-during	Basic	§7.6.9	na	na	
richness	Basic	§7.6.10	na	na	
speak	Basic	§7.6.11	na	na	
speak-header	Basic	§7.6.12	na	na	
speak-numeral	Basic	§7.6.13	na	na	
speak-punctuati	Basic	§7.6.14	na	na	
speech-rate	Basic	§7.6.15	na	na	
stress	Basic	§7.6.16	na	na	
voice-family	Basic	§7.6.17	na	na	
volume	Basic	§7.6.18	na	na	
Common Border, Padding, and Background Properties (§7.7)					
background-atta	Extended	§7.7.1	no	no	
background-col	Basic	§7.7.2	yes	partial	• [0.93] not yet

					implemented for table-column, table-body, table-header and table-footer.
background-ima	Extended	§7.7.3	yes	partial	• [0.93] not yet implemented for table-column, table-body, table-header and table-footer.
background-rep	Extended	§7.7.4	no	yes	
background-pos	Extended	§7.7.5	no	yes	
background-pos	Extended	§7.7.6	no	yes	
border-before-c	Basic	§7.7.7	yes	yes	
border-before-st	Basic	§7.7.8	partial	yes	• [0.20.5] only "solid" works
border-before-w	Basic	§7.7.9	yes	yes	
border-after-col	Basic	§7.7.10	yes	yes	
border-after-styl	Basic	§7.7.11	partial	yes	• [0.20.5] only "solid" works
border-after-wid	Basic	§7.7.12	yes	yes	
border-start-col	Basic	§7.7.13	yes	yes	
border-start-styl	Basic	§7.7.14	partial	yes	• [0.20.5] only "solid" works
border-start-wid	Basic	§7.7.15	yes	yes	

border-end-colo	Basic	§7.7.16	yes	yes	
border-end-style	Basic	§7.7.17	partial	yes	• [0.20.5] only "solid" works
border-end-widt	Basic	§7.7.18	yes	yes	
border-top-color	Basic	§7.7.19	yes	yes	
border-top-style	Basic	§7.7.20	partial	yes	• [0.20.5] only "solid" works
border-top-width	Basic	§7.7.21	yes	yes	
border-bottom-c	Basic	§7.7.22	yes	yes	
border-bottom-s	Basic	§7.7.23	partial	yes	• [0.20.5] only "solid" works
border-bottom-v	Basic	§7.7.24	yes	yes	
border-left-color	Basic	§7.7.25	yes	yes	
border-left-style	Basic	§7.7.26	partial	yes	• [0.20.5] only "solid" works
border-left-width	Basic	§7.7.27	yes	yes	
border-right-col	Basic	§7.7.28	yes	yes	
border-right-styl	Basic	§7.7.29	partial	yes	• [0.20.5] only "solid" works
border-right-wid	Basic	§7.7.30	yes	yes	
padding-before	Basic	§7.7.31	partial	yes	• [0.20.5] only one value allowed • [0.20.5] only implemented for blocks

					• [0.20.5] can't be used to make extra space (use indents + spaces instead) • [0.20.5] can be used to control how much the background-color extends beyond the content rectangle
padding-after	Basic	§7.7.32	partial	yes	• [0.20.5] same limitations as padding-before
padding-start	Basic	§7.7.33	partial	yes	• [0.20.5] same limitations as padding-before
padding-end	Basic	§7.7.34	partial	yes	• [0.20.5] same limitations as padding-before
padding-top	Basic	§7.7.35	partial	yes	• [0.20.5] same limitations as padding-before
padding-bottom	Basic	§7.7.36	partial	yes	• [0.20.5] same limitations as

					padding-before
padding-left	Basic	§7.7.37	partial	yes	• [0.20.5] same limitations as padding-before
padding-right	Basic	§7.7.38	partial	yes	• [0.20.5] same limitations as padding-before
Common Font Properties (§7.8)					
font-family	Basic	§7.8.2	partial	partial	• [0.20.5] font-family lists are not supported, use a single font-family name • [0.93] font-family lists are allowed but glyph based font selection is not supported
font-selection-st	Complete	§7.8.3	no	no	
font-size	Basic	§7.8.4	partial	yes	• [0.20.5] "smaller" and "larger" not implemented
font-stretch	Extended	§7.8.5	no	no	
font-size-adjust	Extended	§7.8.6	no	no	
font-style	Basic	§7.8.7	partial	yes	• [0.20.5] "normal" is

					not supported
font-variant	Basic	§7.8.8	yes	no	
font-weight	Basic	§7.8.9	partial	partial	• [0.20.5] "normal", "bolder" and "lighter" are not supported • [0.93] TODO <relative> font weights
Common Hyphenation Properties (§7.9)					
country	Extended	§7.9.1	yes	yes	
language	Extended	§7.9.2	yes	yes	
script	Extended	§7.9.3	no	no	
hyphenate	Extended	§7.9.4	yes	yes	
hyphenation-cha	Extended	§7.9.5	yes	yes	
hyphenation-pu:	Extended	§7.9.6	yes	yes	
hyphenation-ren	Extended	§7.9.7	yes	yes	
Common Margin Properties - Block (§7.10)					
margin-top	Basic	§7.10.1	partial	yes	• [0.20.5] only on pages and regions
margin-bottom	Basic	§7.10.2	partial	yes	• [0.20.5] only on pages and regions
margin-left	Basic	§7.10.3	partial	yes	• [0.20.5] only on pages and

					regions
margin-right	Basic	§7.10.4	partial	yes	• [0.20.5] only on pages and regions
space-before	Basic	§7.10.5	partial	partial	• [0.20.5] space-before.optimum supported • [0.93] Space adjustment may not fully work everywhere, yet.
space-after	Basic	§7.10.6	partial	partial	• [0.20.5] space-after.optimum supported • [0.93] Space adjustment may not fully work everywhere, yet.
start-indent	Basic	§7.10.7	yes	yes	
end-indent	Basic	§7.10.8	yes	yes	
Common Margin Properties - Inline (§7.11)					
space-end	Basic	§7.11.1	no	no	
space-start	Basic	§7.11.2	no	no	
Common Relative Position Properties (§7.12)					
relative-position	Extended	§7.12.1	no	no	
Area Alignment Properties (§7.13)					
alignment-adjus	Basic	§7.13.1	no	yes	
alignment-basel	Basic	§7.13.2	no	yes	

baseline-shift	Basic	§7.13.3	partial	yes	• [0.20.5] Only values "super" and "sub" have been implemented.
display-align	Extended	§7.13.4	partial	partial	• [0.20.5] Implemented only for table-cell and block-container. • [0.20.5] For table-cell, the "height" attribute must be set for the parent table-row; setting the height of the table or the table-cell results in vertical centering having no effect. • [0.93] TODO Check e-g, i-f-o.
dominant-baseli	Basic	§7.13.5	no	yes	
relative-align	Extended	§7.13.6	no	no	
Area Dimension Properties (§7.14)					
block-progressi	Basic	§7.14.1	no	yes	
content-height	Extended	§7.14.2	no	yes	
content-width	Extended	§7.14.3	no	yes	

height	Basic	§7.14.4	yes	yes	
inline-progressio	Basic	§7.14.5	no	yes	
max-height	Complete	§7.14.6	no	no	
max-width	Complete	§7.14.7	no	no	
min-height	Complete	§7.14.8	no	no	
min-width	Complete	§7.14.9	no	no	
scaling	Extended	§7.14.10	no	yes	
scaling-method	Extended	§7.14.11	no	no	
width	Basic	§7.14.12	yes	yes	
Block and Line-related Properties (§7.15)					
hyphenation-kee	Extended	§7.15.1	no	no	
hyphenation-lad	Extended	§7.15.2	no	yes	
last-line-end-ind	Extended	§7.15.3	no	yes	
line-height	Basic	§7.15.4	yes	yes	
line-height-shift-	Extended	§7.15.5	no	no	
line-stacking-str	Basic	§7.15.6	no	partial	• [0.93] value "line-height" not supported
linefeed-treatme	Extended	§7.15.7	no	yes	
white-space-trea	Extended	§7.15.8	no	partial	• [0.93] inline elements may interfere with correct handling of this property in some cases

text-align	Basic	§7.15.9	partial	partial	• Only start, end, center and justify are supported
text-align-last	Extended	§7.15.10	partial	partial	• Only start, end, center and justify are supported
text-indent	Basic	§7.15.11	yes	yes	
white-space-col	Extended	§7.15.12	yes	yes	
wrap-option	Basic	§7.15.13	yes	partial	• [0.93] Only supported on fo:block.
Character Properties (§7.16)					
character	Basic	§7.16.1	yes	yes	
letter-spacing	Extended	§7.16.2	yes	yes	
suppress-at-line	Extended	§7.16.3	no	no	
text-decoration	Extended	§7.16.4	yes	yes	
text-shadow	Extended	§7.16.5	no	no	
text-transform	Extended	§7.16.6	no	yes	
treat-as-word-sp	Extended	§7.16.7	no	no	
word-spacing	Extended	§7.16.8	no	yes	
Color-related Properties (§7.17)					
color	Basic	§7.17.1	yes	yes	
color-profile-nar	Extended	§7.17.2	no	no	
rendering-intent	Extended	§7.17.3	no	no	
Float-related Properties (§7.18)					
clear	Extended	§7.18.1	no	no	

float	Extended	§7.18.2	no	no	
intrusion-displad	Extended	§7.18.3	no	no	
Keeps and Breaks Properties (§7.19)					
break-after	Basic	§7.19.1	yes	yes	
break-before	Basic	§7.19.2	yes	yes	
keep-together	Extended	§7.19.3	partial	partial	• [0.20.5] works only in table rows • [0.93] works on all implemented block-level FOs, but not on inline-level FOs. • [0.93] <integer> values are not supported.
keep-with-next	Basic	§7.19.4	partial	partial	• [0.20.5] works only in table rows • [0.93] works on all implemented block-level FOs, but not on inline-level FOs. • [0.93] <integer> values are not supported.
keep-with-previd	Basic	§7.19.5	partial	partial	• [0.20.5]

					works only in table rows • [0.93] works on all implemented FOs, except list- and table-related and inline-level FOs. • [0.93] \<integer\> values are not supported.
orphans	Basic	§7.19.6	no	yes	
widows	Basic	§7.19.7	no	yes	
Layout-related Properties (§7.20)					
clip	Extended	§7.20.1	no	no	
overflow	Basic	§7.20.2	no	yes	
reference-orient	Extended	§7.20.3	no	yes	• [0.20.5] Workaround for page-orientation (portrait vs. landscape) is to swap the page-width and page-height properties. • [0.20.5] Workaround for block-container is to use SVG.
span	Extended	§7.20.4	yes	yes	

Leader and Rule Properties (§7.21)					
leader-alignmer	Extended	§7.21.1	partial	no	• [0.20.5] not value "page" • [0.93] Not supported
leader-pattern	Basic	§7.21.2	partial	yes	• [0.20.5] not value "use-content" • [0.93] Value "use-content" does not work in all circumstances.
leader-pattern-w	Extended	§7.21.3	yes	yes	
leader-length	Basic	§7.21.4	partial	yes	• [0.20.5] leader-length.minimum is not used at all
rule-style	Basic	§7.21.5	yes	yes	
rule-thickness	Basic	§7.21.6	yes	yes	
Properties for Dynamic Effects Formatting Objects (§7.22)					
active-state	Extended	§7.22.1	no	no	
auto-restore	Extended	§7.22.2	no	no	
case-name	Extended	§7.22.3	no	no	
case-title	Extended	§7.22.4	no	no	
destination-plac	Extended	§7.22.5	no	no	
external-destina	Basic	§7.22.6	yes	yes	
indicate-destina	Extended	§7.22.7	no	no	
internal-destinat	Extended	§7.22.8	yes	yes	
show-destinatio	Extended	§7.22.9	no	no	
starting-state	Extended	§7.22.10	no	no	

switch-to	Extended	§7.22.11	no	no	
target-presentat	Extended	§7.22.12	no	no	
target-processir	Extended	§7.22.13	no	no	
target-styleshee	Extended	§7.22.14	no	no	
Properties for Markers (§7.23)					
marker-class-na	Extended	§7.23.1	no	yes	
retrieve-class-na	Extended	§7.23.2	no	yes	
retrieve-position	Extended	§7.23.3	no	yes	
retrieve-bounda	Extended	§7.23.4	no	yes	
Properties for Number to String Conversion (§7.24)					
format	Basic	§7.24.1	no	yes	
grouping-separa	Extended	§7.24.2	no	no	
grouping-size	Extended	§7.24.3	no	no	
letter-value	Basic	§7.24.4	no	no	
Pagination and Layout Properties (§7.25)					
blank-or-not-bla	Extended	§7.25.1	yes	yes	
column-count	Extended	§7.25.2	yes	yes	
column-gap	Extended	§7.25.3	yes	yes	
extent	Extended	§7.25.4	yes	yes	
flow-name	Basic	§7.25.5	yes	yes	
force-page-cour	Extended	§7.25.6	no	yes	
initial-page-num	Basic	§7.25.7	yes	yes	
master-name	Basic	§7.25.8	yes	yes	
master-referenc	Basic	§7.25.9	yes	yes	
maximum-repea	Extended	§7.25.10	yes	yes	
media-usage	Extended	§7.25.11	no	no	
odd-or-even	Extended	§7.25.12	yes	yes	

page-height	Basic	§7.25.13	yes	yes	
page-position	Extended	§7.25.14	partial	yes	• [0.20.5] "last" isn't implemented!
page-width	Basic	§7.25.15	yes	yes	
precedence	Extended	§7.25.16	no	yes	
region-name	Basic	§7.25.17	yes	yes	
Table Properties (§7.26)					
border-after-pre	Basic	§7.26.1	no	no	
border-before-p	Basic	§7.26.2	no	no	
border-collapse	Extended	§7.26.3	partial	partial	• Implementation of collapsed table model not complete.
border-end-prec	Basic	§7.26.4	no	no	
border-separatic	Extended	§7.26.5	no	yes	
border-start-pre	Basic	§7.26.6	no	no	
caption-side	Complete	§7.26.7	no	no	
column-number	Basic	§7.26.8	no	yes	
column-width	Basic	§7.26.9	partial	yes	• [0.20.5] "percentage" not implemented. Workaround is to use the XSL-FO "proportional-column-width" function.
empty-cells	Extended	§7.26.10	no	yes	
ends-row	Extended	§7.26.11	no	yes	
number-column	Basic	§7.26.12	no	yes	

number-column:	Basic	§7.26.13	yes	yes	
number-rows-sp	Basic	§7.26.14	yes	yes	
starts-row	Extended	§7.26.15	no	yes	
table-layout	Extended	§7.26.16	no	no	
table-omit-foote	Extended	§7.26.17	yes	yes	
table-omit-head	Extended	§7.26.18	yes	yes	
Writing-mode-related Properties (§7.27)					
direction	Basic	§7.27.1	no	no	
glyph-orientation	Extended	§7.27.2	no	no	
glyph-orientation	Extended	§7.27.3	no	no	
text-altitude	Extended	§7.27.4	no	no	
text-depth	Extended	§7.27.5	no	no	
unicode-bidi	Extended	§7.27.6	no	no	
writing-mode	Basic	§7.27.7	no	no	
Miscellaneous Properties (§7.28)					
content-type	Extended	§7.28.1	no	no	
id	Basic	§7.28.2	yes	partial	• [0.93] IDs on table-header, table-footer, table-body, table-row, table-and-caption, table-caption, inline-container and bidi-override are not available, yet.
provisional-labe	Basic	§7.28.3	yes	yes	
provisional-dista	Basic	§7.28.4	yes	yes	

ref-id	Extended	§7.28.5	yes	yes	
score-spaces	Extended	§7.28.6	no	no	
src	Basic	§7.28.7	yes	yes	
visibility	Extended	§7.28.8	no	no	
z-index	Extended	§7.28.9	no	no	
Shorthand Properties (§7.29)					
background	Complete	§7.29.1	no	no	
background-pos	Complete	§7.29.2	no	yes	
border	Complete	§7.29.3	no	yes	
border-bottom	Complete	§7.29.4	yes	yes	
border-color	Complete	§7.29.5	partial	yes	• [0.20.5] only one value allowed
border-left	Complete	§7.29.6	yes	yes	
border-right	Complete	§7.29.7	yes	yes	
border-style	Complete	§7.29.8	partial	yes	• [0.20.5] only "solid" works
border-spacing	Complete	§7.29.9	no	yes	
border-top	Complete	§7.29.10	yes	yes	
border-width	Complete	§7.29.11	yes	yes	
cue	Complete	§7.29.12	na	na	
font	Complete	§7.29.13	no	partial	• [0.93] Enum values other than "inherit" not yet supported.
margin	Complete	§7.29.14	partial	yes	• [0.20.5]

					only on pages and regions
padding	Complete	§7.29.15	partial	yes	• [0.20.5] only one value allowed • [0.20.5] only implemented for blocks • [0.20.5] can't be used to make extra space (use indents + spaces instead) • [0.20.5] can be used to control how much the background-color extends beyond the content rectangle
page-break-afte	Complete	§7.29.16	no	yes	
page-break-befc	Complete	§7.29.17	no	yes	
page-break-insi	Complete	§7.29.18	no	yes	
pause	Complete	§7.29.19	na	na	
position	Complete	§7.29.20	partial	yes	• [0.20.5] "inherit" not handled
size	Complete	§7.29.21	no	no	
vertical-align	Complete	§7.29.22	partial	partial	• [0.20.5] Only works as a

					shorthand for baseline-shift property. [0.93] Percentages are not supported, yet.
white-space	Complete	§7.29.23	no	yes	
xml:lang	Complete	§7.29.24	no	no	

4. XSL-FO Core Function Library Support Table (§5.10)

The following is a summary of FOP's current support for the XSL-FO Core Function Library.

Function Name	XSL-FO Conformance Level	Citation	Support in FOP		Comments
			0.20.5 (previous)	0.93 (stable)	
Number Functions (§5.10.1)					
floor	Basic	§5.10.1	yes	yes	
ceiling	Basic	§5.10.1	yes	yes	
round	Basic	§5.10.1	yes	yes	
min	Basic	§5.10.1	yes	yes	
max	Basic	§5.10.1	yes	yes	
abs	Basic	§5.10.1	yes	yes	
Color Functions (§5.10.2)					
rgb	Basic	§5.10.2	yes	yes	
rgb-icc	Basic	§5.10.2	no	no	
system-color	Basic	§5.10.2	no	yes	
Font Functions (§5.10.3)					
system-font	Basic	§5.10.3	no	no	

Property Value Functions (§5.10.4)					
inherited-proper	Basic	§5.10.4	yes	yes	
label-end	Basic	§5.10.4	yes	yes	
body-start	Basic	§5.10.4	yes	yes	
from-parent	Basic	§5.10.4	yes	yes	
from-nearest-sp	Basic	§5.10.4	yes	yes	
from-table-colur	Basic	§5.10.4	no	yes	
proportional-col	Basic	§5.10.4	yes	yes	
merge-property-	Basic	§5.10.4	no	no	