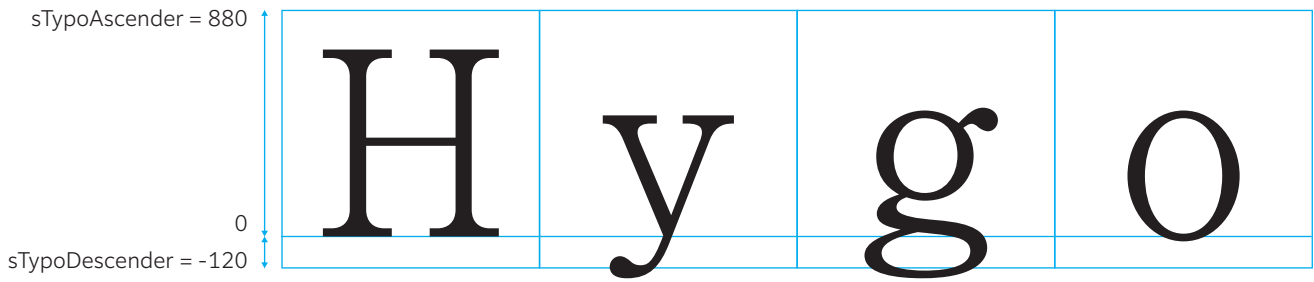


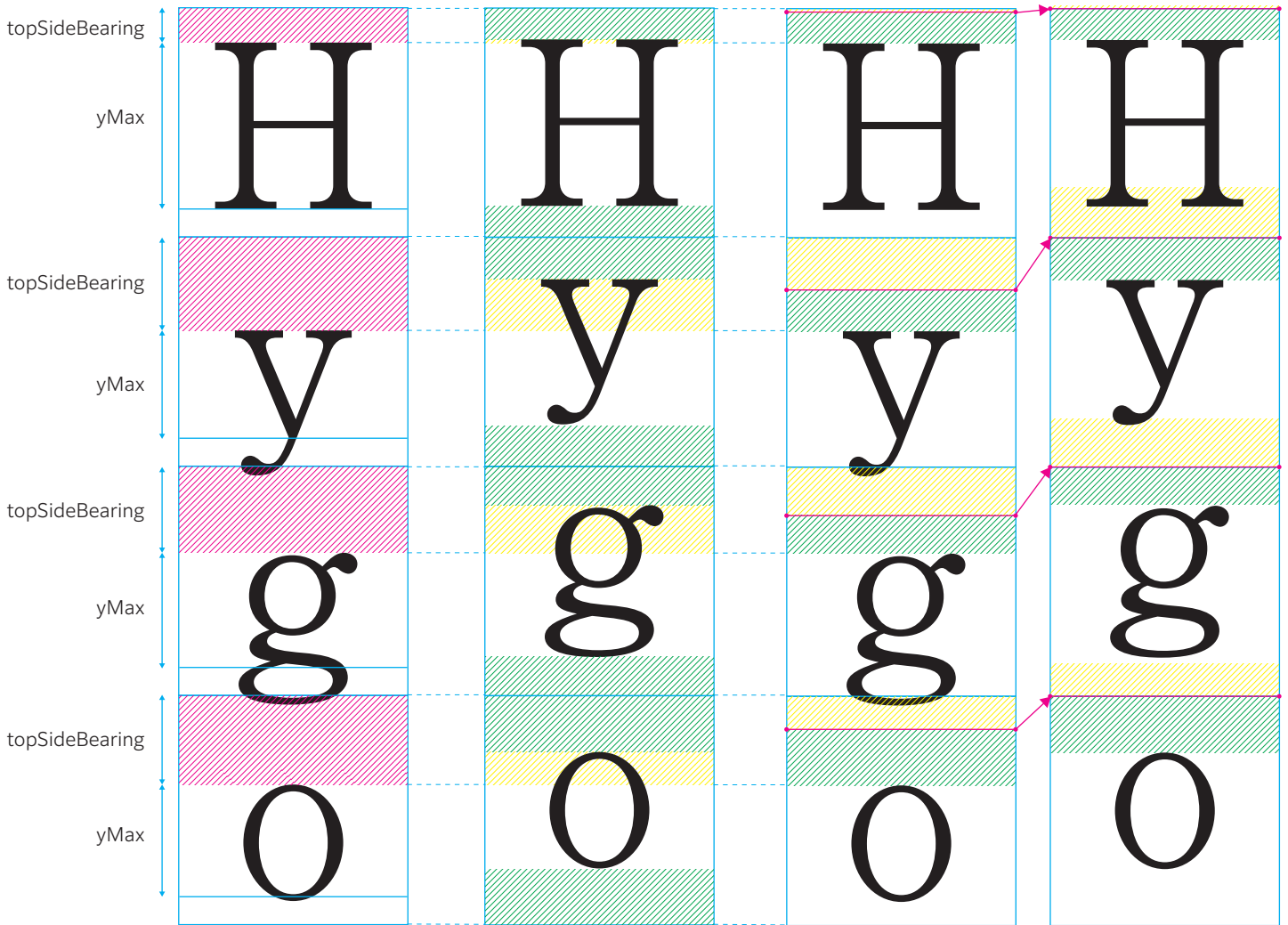
(1) FULL-WIDTH LATIN IN HORIZONTAL TEXT



(2) NO VMTX/VORG OVERRIDE

(3) VMTX

(4) VORG



VMTX

↕ topSideBearing =
■ Green

VORG

● vertOriginY =
OS/2.sTypoAscender - ■ Yellow

The *vmtx override* technique alters the default side bearings faithful to the contours (red zones in 2) with the new ones (green zones in 3) so that they look less ugly in vertical settings. As *glyph* table stores the bounding box for each glyph (see *yMax* in the diagram), the adjusted vertical origin can be determined rather trivially.

The *CFF table* doesn't have such bounding box for each glyph, while it can be technically computed with varying degrees of accuracy and some extra computing power. So instead, the *VORG* table stores vertical origins based only on the offset (yellow zones in 3 and 4) — the amount you need to shift upwards/downwards when you display such glyphs. Even in this case, the *vmtx* table will have adjusted side bearings to be consistent with the metrics the *VORG* provides.

Typically, such glyphs are mathematically centered but how you tweak an alignment is completely up to typeface designers.

This adjustment is only about the glyph placement so it doesn't affect any glyph advances or the whole text layout.