

DEPARTMENT DRAWING STANDARDS

Department of Architecture • College of Communication + Fine Arts • The University of Memphis

Effective Fall 2010; Updated Summer 2013 (subject to revision)

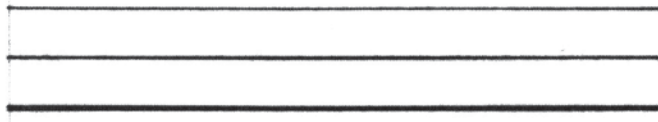
Unless otherwise stated by your professor, you are to:

- Utilize at least four line weights to construct plan, section, elevation, and other technical drawings to demonstrate an understanding of spatial depth in a two-dimensional format. This includes construction of well-formed lines that register a point of beginning and ending and are continuous in density and quality. See examples contained in this document.
- Appropriately letter all drawing titles, names, or any other written work that may be required for design coursework. All fonts used for typed papers or sheets and drawings composed with the use of a computer should be sans-serif (e.g., Arial, Calibri, Century Gothic, Tahoma, or Verdana). See lettering example contained in this document.
- Use acceptable graphic designations such as north arrows, graphic scales, section cut indicators, landscaping and entourage. This type of supportive information, while it may be manipulated to support graphic content (change in color, placement, etc.), should remain consistent throughout the visual presentation of a project (i.e., across a layout, from board to board). See examples contained in this document.

EXAMPLES

- **Line Quality and Line Weight**

- “Line Quality refers to the crispness and the darkness (weight intensity) of a line. The darkness of a line is governed by the pencil used and the pressure applied. Inked lines generally have uniform value but can vary in width. It is extremely important to be consistent in drawing the same type of lines” (Yee, 2007, p. 36). Additionally, for consistent line quality, “pull the pen or pencil in the direction of the line being drawn” (Ching & Juroszek, 1998, p. 118). Do not push the pen or pencil, “as this makes it difficult to control the quality of the line” (p. 118). When drawing with lead, “it is important to have a well-sharpened point that is neither too stubby nor too rounded” (p. 118). In order to maintain lead sharpness and line uniformity, rotate or roll the drawing instrument between your thumb and forefinger as the line is pulled. To achieve a line that has a defined beginning and end, “back up slightly and exert a little extra pressure” at the start and the finish of each stroke; at the same time, maintain a steady pace throughout (p. 118).



Line Quality Example. “Strive for single-stroke lines. Achieving the desired line weight, however, may require drawing a series of closely spaced lines”(Ching, 2009, p. 20).

- Line weight refers to the width or thickness of a line in its attempt to make spatial (depth in an elevation), diagrammatic (hierarchy), functional (guidelines),etc. distinctions. While it may be a time-saver or “common practice to use one lead and vary the pressure to give the desired line weight” (Yee, 2007, p. 32), adhere to the following guidelines until you can demonstrate a correct understanding of the use of line weight.

—————
.5_Micron 05_2B
optional: .8_Micron 08_4B
(for section cuts only - to include ground lines)
AutoCAD: .6 Color 4 (Cyan) or
.8 Color 5 (Blue)
Revit: 07-09 Line

Heavy line weights “delineate the profiles of plan and section cuts as well as spatial edges” (Ching, 2009, p. 18). Spatial edges “depict where solid matter meets spatial void” (Ching & Juroszek, 1998, p. 117); it is where the “boundaries of a form [are] separated from the background by some intervening space” (Ching, 2009, p. 93).

—————
.35_Micron 03_HB
AutoCAD: .4 Color 3 (Green)
Revit: 05-06 Line

Medium line weights indicate “the edges and intersections of planes” (Ching, 2009, p. 18). This includes lines that describe “contours appearing within the outer silhouette of a three-dimensional volume” (Ching & Juroszek, 1998, p. 117); known as planar corners, “it is the intersection of two or more planes that are visible to the eye” (Ching, 2009, p. 93).

—————
.25_Micron 02_H or F
AutoCAD: .2 Color 2 (Yellow)
Revit: 03-04 Line

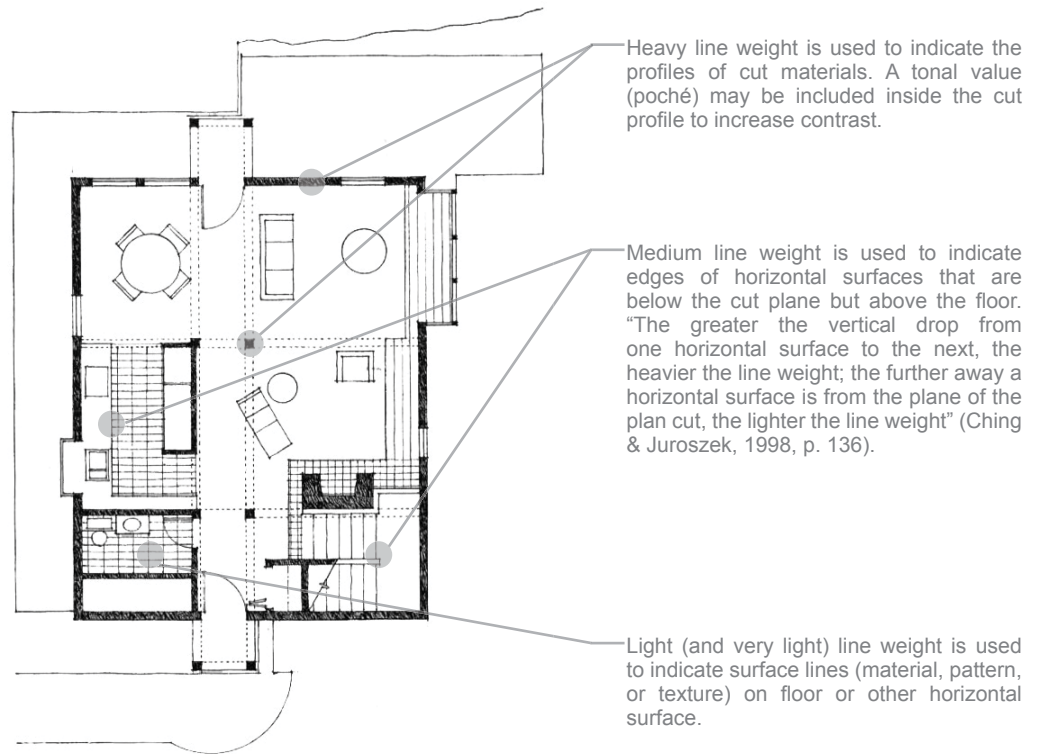
Light line weights describe shallow changes in depth associated with close surfaces or planes.

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.13_Micron 005_2H (4H-6H)
AutoCAD: .05 Color 1 (Red)
Revit: 01-02 Line

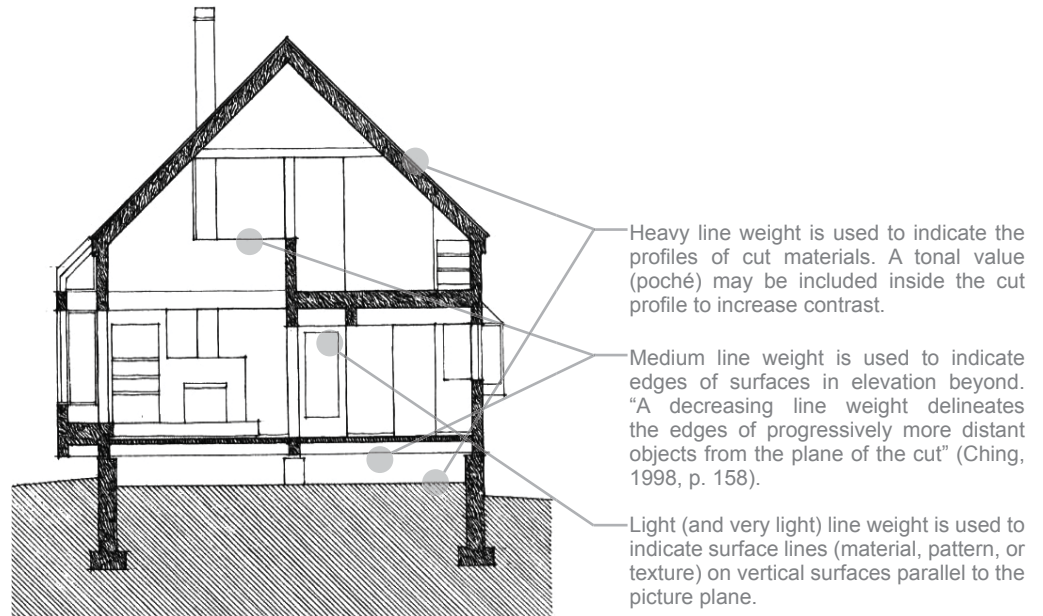
Very light line weights “suggest a change in material, color, or texture, without a change in the form of an object” (Ching, 2009, p. 18). These may also be called surface lines. This line weight is also used to “layout drawings, establish organizing grids, and indicate surface textures” (Ching, 2009, p. 18), as well as for any other necessary guidelines.

Note: “The visible range and contrast of line weights should be in proportion to the size and scale of a drawing” (Ching, 2009, p. 18).

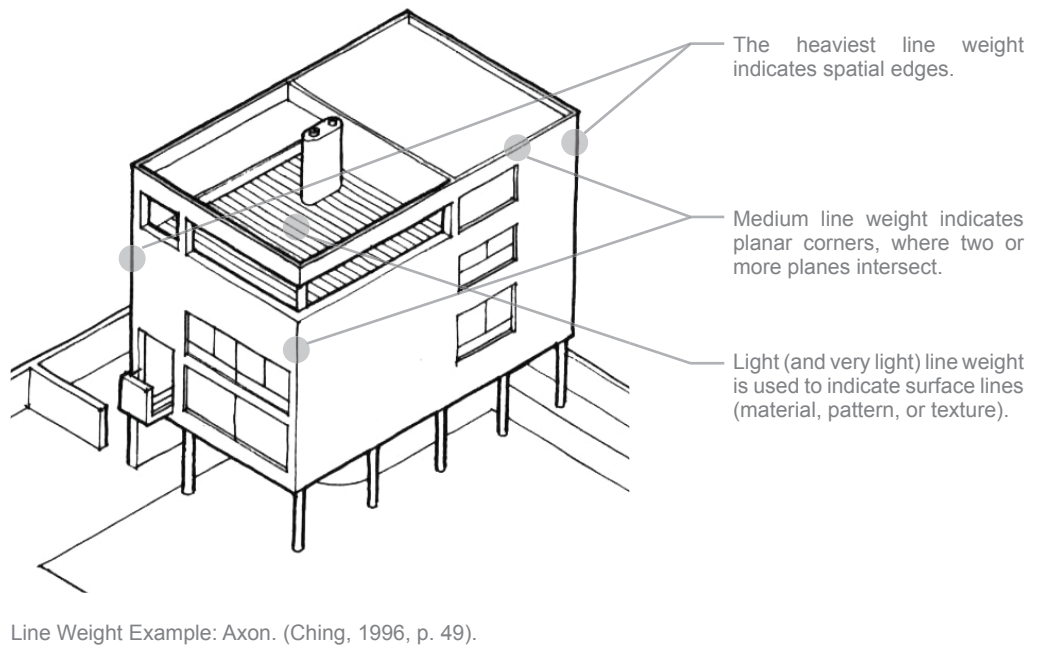
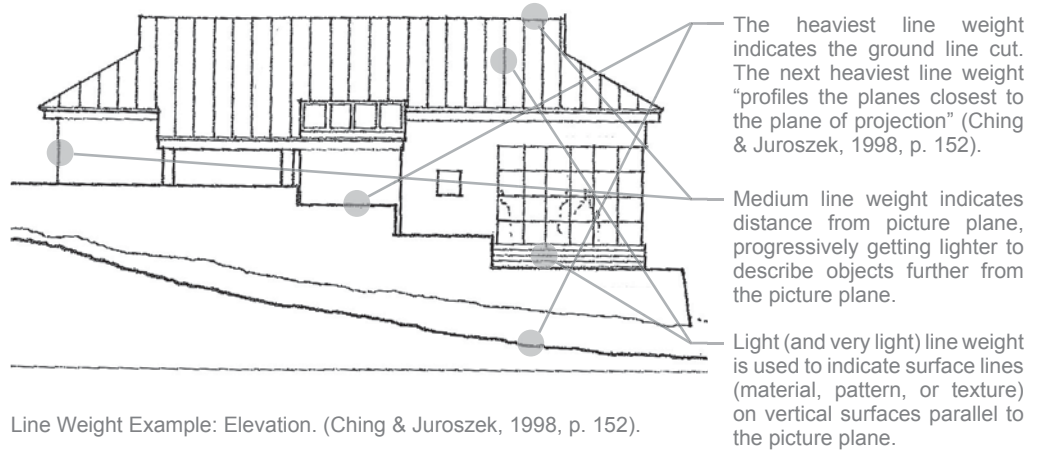
AutoCAD and Revit sizes indicate specific plot style and template designations. See Computer Application courses for further guidance. AutoCAD provided by H. Hall (HALLSPLOT.ctb); Revit provided by J. Myers.



Line Weight Example: Plan. (Ching, 1996, p. 23).

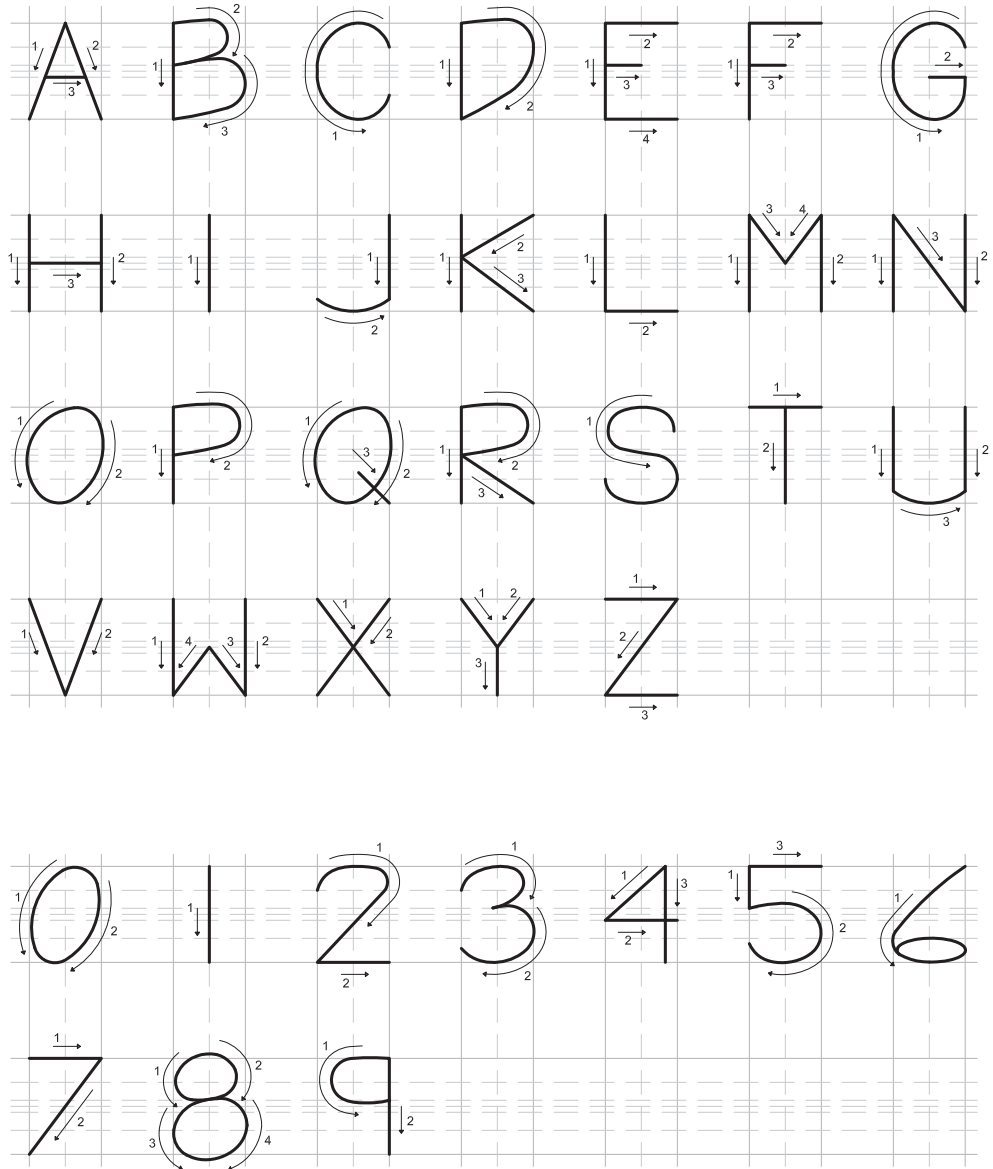


Line Weight Example: Section. (Ching, 1996, p. 37).



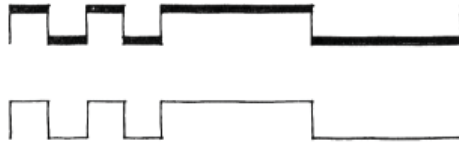
- **Lettering**

- “The most important characteristic of lettering is legibility”, including “readability and consistency in both style and spacing” (Ching, 2009, p.. 203-204). Make use of guidelines when lettering, “to control the height and line spacing” and “maintain similar proportions among the characters” through continuous lines of text (p. 204). When used in presentation formats, text should have visual hierarchy; arrange titles, subtitles, and other text or identifying information in “descending order of visual importance” (Yee, 2007, p. 25). In computer fonts, remember that “the character of the typeface should be appropriate to the design being presented and not detract from the drawings themselves” (Ching, 2009, p. 203). Additionally, text should be of an appropriate scale relative to the drawing and the distance it must be read from.

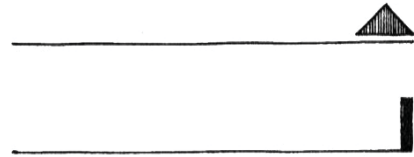


Lettering Example: Font. This lettering example is provided as a guide for font. The strokes are developed as indicated by the arrows above. Fonts without serifs are the common practice of this department.

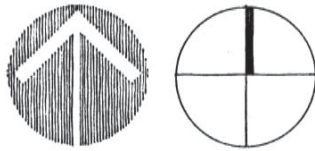
- **Graphic Designations**



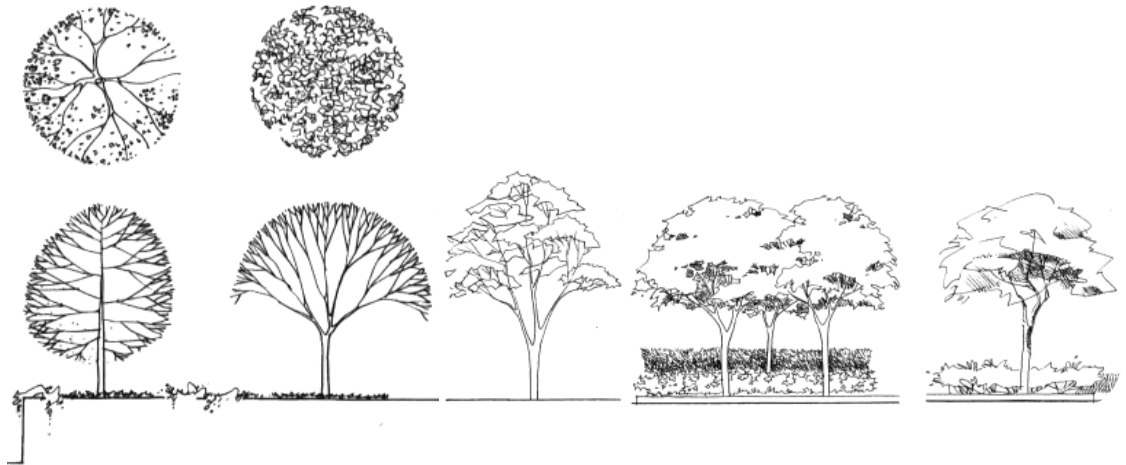
Graphic Scale (Ching, 1996, p. 146).



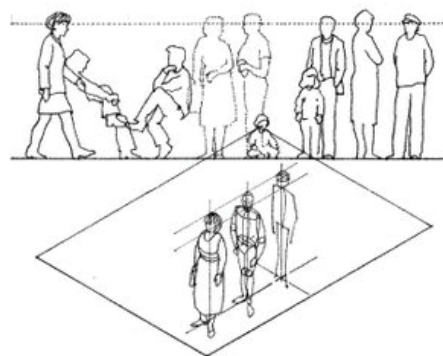
Section Cut Indicator (Ching, 1996, p. 146).



North Arrows (Ching, 1996, p. 146).



Landscaping (Ching, 1996, p. 137).



People (Ching & Juroszek, 1998, p. 315).

References

Ching, F. (2009). *Architectural graphics*. New York: John Wiley.

Ching, F. (1996). *Architectural graphics*. New York: John Wiley.

Ching, F., & Juroszek, S. P. (1998). *Design drawing*. New York: Van Nostrand Reinhold.

Yee, R. (2007). *Architectural drawing: A visual compendium of types and methods*. Hoboken: John Wiley & Sons.