

INTRODUCTION

Architectural drawings may be subdivided into two general classifications. Drawings which are used for study, design and consultation with the client; and drawings which are used to facilitate the construction of buildings. The latter are called “working drawings”. The following instruction outlines the progressive steps for producing *working drawings* of a house.

The purpose of the working drawings (together with the specifications) is to provide the information from which accurate estimates of cost can be obtained; to provide a basis for legal contracts; and to indicate and describe precisely the construction so that they can be an “order of work”. The working drawings *must* be accurately drawn to scale and include *all* necessary details, notes and dimensions.

The designer should attempt to produce a clear and neat set of drawings which must be checked thoroughly to discover any errors or ambiguities.

Main Floor Plan

- Resource you are to use: Architectural Residential Drawing and Design by: Clois E. Kicklighter
- Scale: 1:1 – plotted at $\frac{3}{4}"=1'0"$
- Paper size: archD (24 x 36 mm)

A. Layout

1. After approval of your sketches by your instructor proceed to draw using CADKEY
2. Lay out and block in the outside walls of the house. Draw 8" for frame construction.
3. Locate centre line of all interior partitions then block in the partition thickness.

2 x 6" stud exterior partition
2 x 4" stud interior partition

4. Locate all exterior openings (windows and doors) proceeding clockwise around the plan. (see chapter 13. Pg. 223)
5. Locate all openings in the interior partitions proceeding top to bottom, then left to right; or use the room by room method.
6. Locate and block in the stairwell. *Note: The stairwell must be checked by graphical computation to assess critical headroom dimensions.* (see chapter 14. Pg.253) also (see handout “Stair Design”).
7. Lay out all built-in features such as kitchen cupboards and counters, vanity, planters, etc. (kitchen equipment such as stove, range, built-in-oven, refrigerator, etc., are to indicated at this stage.) (see chapter 7. Pg. 127)
8. Layout all plumbing fixtures. I.e. bath tub, sink, lavatory, water closet, washing machine, dryer, dishwasher stacks etc. (see chapter 5. Pg.73)
9. Locate fireplace, chimney, flues, etc., and indicate in accordance with data from ‘Graphic Standards’. (see chapter 15. Pg.265)

B. Line In

1. Line-in all exterior openings in accordance with data from “Graphic Standards” (windows, sills, doors, door swings)
2. Line-in all interior walls indication all openings, door swings, folding doors, etc.
3. Line-in all built-in features indication the hidden items such as upper kitchen cupboards, dishwasher, medicine cabinets, with a broken line.
4. Line-in all plumbing fixtures.
5. Line-in fireplace, chimney, flues, etc.

6. Block-in and line-in front and rear stoops and outside steps (indicate railings, if any) patios, planters and any other adjacent concrete, stone or masonry work.
7. Locate and line-in electrical features; wall and ceiling fixtures outlets, switches, receptacles, special receptacles, thermostat, chimes, push buttons, electric dryer outlets, and telephone. (see chapter 19. Pg.331)
8. Locate and line-in conventionally all heating vents, and hot and cold returns. (see chapter 20. Pg. 343)

Dimensioning (see chapter 16. Pg.293)

- a) Indicate all overall dimensions.
- b) Indicate all major variations from the basic form or rectangle.
- c) Dimension all exterior openings. (to their centre line in frame)
- d) Dimension all interior partitions with a continuous line running through the plan at convenient points.
- e) Give the sizes of all doors whether on the swing or through the use of a code and schedule.

Lettering (use 3 mm high letters u.n.o.)

Note: Use a shield under your hand to protect the drawing.

- a) Letter all room titles including clothes, broom and linen closets, etc.
- b) Letter direction of roof and ceiling structure.
- c) All miscellaneous notes, i.e. stove, vanity, counters, medicine cabinet, chimney, folding doors, refrigerator, etc.
- d) All exterior notes, i.e. concrete stoop, stairs, railing, planters.
- e) Show directions of stairs from floor shown and letter the number and

size of riser and tread.

- f) Letter the name of the drawing and indicate the scale employed.
- g) Letter the title block. Utilize appropriate size of letters and employ a bolder face for title and subtitles (6mm high letters”

Check

- 1) Check the overall dimensions for accuracy and clarity.
- 2) Check all “running” dimensions against the overall dimensions.
- 3) Check that all pertinent dimensions against the overall dimensions.
- 4) Check all lettering and notes for spelling, clarity and precision.
- 5) Check that all pertinent notes are shown.
- 6) Check overall drafting for line weight, neatness, clarity and accuracy.
- 7) Check overall sheet for any omissions.