

WORKING DRAWING SETS - BASICS

Title Blocks:

- should be simple and clearly convey the information
- avoid large or complex image files as logos; a simple text or vector file is best
- should take up as little page space as possible, along the base or right hand side of the page
- generally drawing numbers should be located in the bottom right corner of the page as it is the easiest place to see when flicking through a stapled/clipped or bound drawing set; they should also stand out enough to be easily located
- **Drawing Numbers:**
 - o should follow the '100-level, 200-level' system
 - o for small drawing sets use 1.0, 1.1, 1.2, 2.0, 2.1, 3.0 etc.
 - o for larger sets use 1.00, 1.01, 1.02, 2.00 etc. or 100, 101, 102, 200 etc.
 - o the reason you should not use consecutive numbers (01, 02, 03, 04...) is that if you need to add or delete a drawing in the middle of the order (which happens a lot) it will screw up your numbering, which should be the same every time you issue a drawing set so that you can refer to the same drawing number every time (eg. Section B is always 2.01)
 - o Standard drawing number levels:
 - 0.00 Cover Page
 - 1.00 Plans (site, floor plans, reflected ceiling plans, framing)
 - 2.00 Elevations
 - 3.00 Sections
 - 4.00 Details
 - o Other drawing levels (5.00, 6.00 etc) may include:
 - Interior Elevations and Joinery Drawings (kitchens, bathrooms etc)
 - Services Plans (Plumbing, Electrical etc)
 - Door and Window Schedules
- **Drawing Scales:**
 - o should always be stated along with the print sheet size, eg 1:50 @ A3
 - o if more than one scale drawing on a page, put 'various' in the title block, and put the scale of each drawing, along with the title, in the label (drawing marker) under each drawing
 - o if an image, perspective or other drawing that is not a scale drawing, put 'NTS' (not to scale)
 - o in almost all cases you should use **Standard Drawing Scales:**
 - 1:1000, 1:500, 1:200 [location]
 - 1:200, 1:100 [site]
 - 1:100, 1:50 [plans, sections, elevations]
 - 1:50, 1:20 [part plans, sections, interior elevations]
 - 1:10, 1:5, 1:2, 1:1 [details]
 - 1:25 is occasionally used but is less common
 - o keep scales consistent, ie all plans at one scale, all elevs, all sections (except details which depend on how much detailed information needs to be shown)

Drawing schedules:

- in their most basic form, these are like a 'contents' of the drawing numbers and titles
- should appear on your cover page or first page, although in some cases are supplied as a separate document (usually A4)
- for larger projects, drawing schedules will include:
 - o drawing number and title
 - o scale
 - o schedule of issue dates and revisions
 - o record of all parties to whom drawings issued

Naming and ordering drawings

- **consistency** is the key, eg use 'ground floor, first floor' etc or 'level G, level 1' but don't mix them up
- use standard ordering conventions, such as lowest-highest, left-right, clockwise...
- when dealing with an existing building, existing plans come before proposed, and all plans and elevations should be labelled 'existing' or 'proposed' (generally sections and details will all be proposed so you don't need to specify)
- **sections and elevations** are best named by number or letter, eg:
 - o 'Elevation A' rather than 'Front Elevation' (in some cases which side is 'front' is subjective, or depends on where you are standing...!)
 - o Alternatively use N Elevation, E Elevation, S Elevation, W Elevation (the direction refers to which the elevation is facing, as if you were looking out the window – so if you would be looking out to the North, its N Elevation)
 - o Sections should be named Section A-A', Section B-B' etc (see Section and Elevation markers below)

Section and Elevation markers

- should be on all floor plans
- elevation markers should point to the face (elevation) of the building which they will show, and be labeled with the elevation number/letter (eg 'A')
- section markers should show the section line (at the sides of the drawing only, or with a dashed line through the drawing), with the arrow pointing the direction the section is facing, and the section number/letter
 - o drawing conventions are to have A at one end and A' at the other, so that the section name is actually A-A' or A'-A, depending on which way it is facing

Other Markers

- Detail Markers: all details should have a detail marker on the appropriate floor plan (for plan details) or section (for sectional details) that indicates the area to be shown in more detail, the detail number, and the page reference (eg Det.1 | 4.01)
- Door and Window Numbers: all doors and windows should be numbered
 - o start at an obvious place and move clockwise, or in clear order of importance
 - o doors labelled D_01, D_02 etc, windows W_01, W_02 etc
 - o for multi storey buildings use the storey number, e.g. D_0.1 (ground floor), D_1.1 (first floor), or whatever makes sense for your building

- these numbers will refer to detail drawings of each door and window, or a door/window schedule – this is a page or set of pages given to the joinery company (or companies) contracted to make/supply the doors and windows, and has all the necessary info about the dimensions, construction, materials and finishes of each door/window

Other

- dimensions
- annotations/notes
- line weights
- fills and hatches

DRAWING ESSENTIALS:

Location Plan [Cover page/100 level | 1:1000/1:500]

- shows site in context of surrounding buildings/landmarks
- often aerial view from council maps

Site Plan [100 level | 1:200/1:100]

- should always have north arrow (as should floor plans unless it is obviously straight up the page)

Floor Plans & other plans [100 level | 1:100/1:50]

- are a section cut horizontally through the building, so should show vertical framing members and linings/cladding as cut through (heavier line, hatch/fill)
- should not show horizontal framing (ie floor framing), only finished flooring
- you can have separate **framing plans** to show framing set-out
- should show stairs up to the point where the horizontal section is cut (and dashed above that), and the same below
- should indicate relationships between storeys, via one or more of the following:
 - grid lines
 - on ground floor plan, show outline of first floor dashed above
 - on first floor plan, show outline of ground floor below (can show as solid outline of roof edge with wall line dashed below, whatever is most clear)
- elevation and section markers, detail markers, door and window numbers
- notes: wall framing/construction, linings/cladding, finishes
- note ceiling heights on floor plan and/or...
- **reflected ceiling plan** (horizontal section same as a floor plan, but looking up, like the ceiling is reflected in a mirror)
 - shows ceiling finishes and levels/heights
 - location of light fittings and switches, and wiring connections
 - any other ceiling features, skylights etc (if you don't have a RCP you can dash these in over your floor plan)
- other plans include:
 - plumbing, services and electrical (may be toward back of drawing set, eg 700 level)

- floor plans may be split into separate drawings if there is too much information, for example:
 - setout plan (showing wall construction and framing setout dimensions)
 - general arrangement or layout plan (showing arrangement of spaces and fixtures)
 - joinery plan (specifically noting joinery fixtures and layout dimensions)
- it comes down to what the clearest way is to show all the required info

Elevations [200 level, 1:100/1:50]

- show the outside face of the building, noting cladding finishes and positions of doors and windows
- should show the ground line as a thick line (ground hatch/fill optional if you consider the elevation as a section cut just in front of the building face)
- should not show framing or foundations unless visible from outside
- should indicate level dimensions (these are usually finished floor levels or FFL, starting at 0.000 which is ground floor FFL, and give the relative heights above or below ground floor FFL for the main horizontal building elements like floor/ceiling)

Sections [300 level, 1:50]

- should show horizontal framing members, floor/ceiling linings and roofing as cut through (heavier line, hatch/fill)
- this is where you note all structural information (framing sizes, spacings etc) if you are not including separate framing plans)
- should show ground line (thick line) and fill, and foundations
- should indicate level dimensions

Details [400 level, 1:10/1:5/1:2/1:1]

- needed to indicate more detail about the construction of a particular element or connection between elements
- either plan or section detail
- should employ clear and consistent use of line weights and hatches to clearly and accurately explain the detail