



Working Drawing

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Iqra National University

- » Civil Engineering Drawings
- » Architectural drawings
- » Detail drawings
- » Landscape Drawings
- » As built drawings
- » Shop drawings

Type of Drawings >

- » A schematic representation of a building, object, or component made according to defined conventions and projected to serve in the construction or fabrication
- » Engineering drawings are frequently used to describe public works projects, such as: bridges, highways, and dams.

Civil Engineering Drawing >

- » A sketch, diagram, plan used to design, construct, and document buildings and other structures.
- » Describe form & construction of building component.
- » The drawings may be used to indicate the overall appearance, inside or outside the structure, or they may be used to indicate precise measurements and other details for construction.
- » It is the base drawings for other construction works such as electrical, sewage, mechanical
- » Drawings, especially those for construction purposes, may be issued as a set, with different sheets indicating different types of construction (electrical, mechanical, plumbing).

Architectural Drawing >

- » **Detail drawings** provide a **detailed** description of a part of an object such as a building, bridge, tunnel, machine, plant, and so on. They tend to be large-scale **drawings** that show in **detail** parts that may be included in less **detail** on general arrangement **drawings**
- » These drawings are also known as blow ups

Detail drawings



- » Architectural drawings that reflect changes made during the construction process, recording differences between the original design and the completed structure.
- » As-built drawings are based on design drawings used during construction, whereas measured drawings are usually made long after construction is completed and no design drawings exist

As-built drawings >

- » It is a drawing or set of drawings produced by the contractor, supplier, manufacturer, subcontractor, or fabricator.
- » Shop drawings are typically required for pre-fabricated components.
- » Examples of these include: elevators, structural steel, trusses, pre-cast, windows, appliances, cabinets, air handling units and millwork.

Shop Drawings

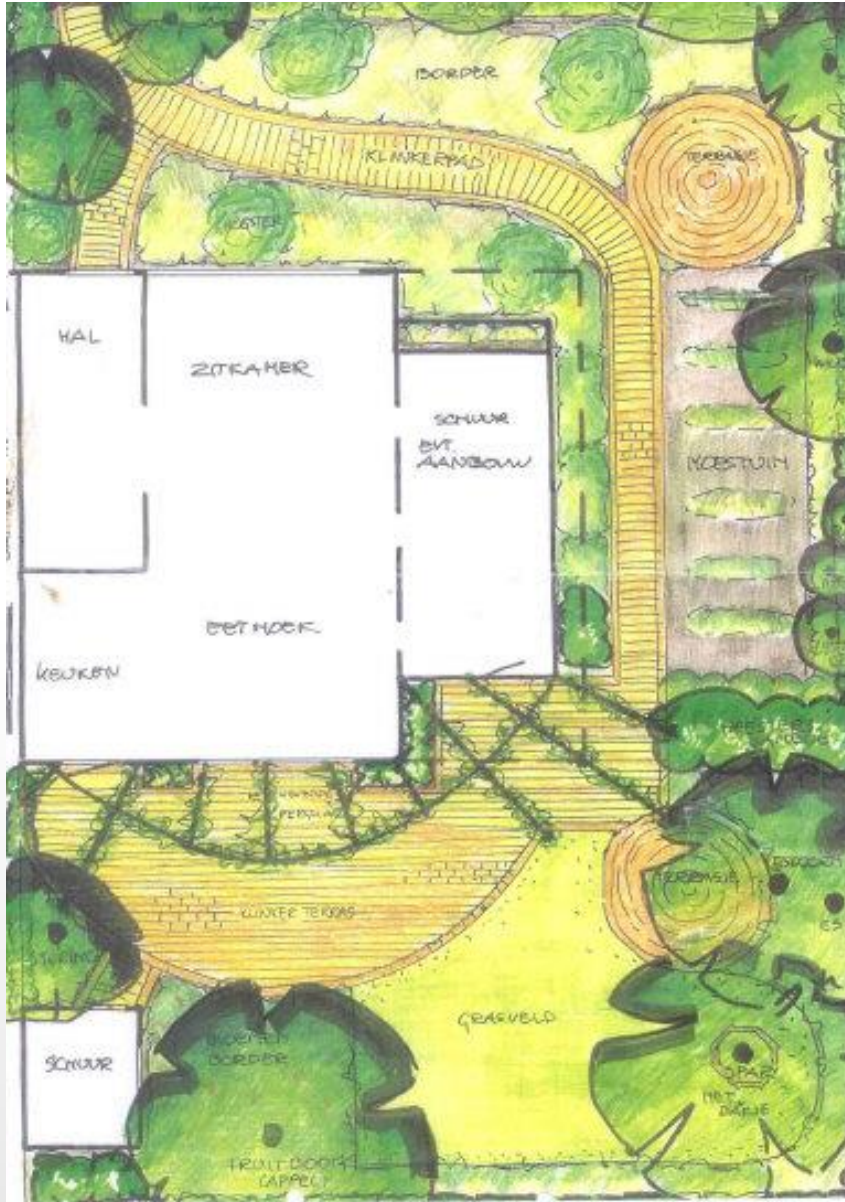


- » **Shop drawings** are not produced by architects and engineers under their contract with the owner.
- » The shop drawing is the manufacturer's or the contractor's drawn version of information shown in the construction documents.
- » The shop drawing normally shows more detail than the construction documents.
- » It is drawn to explain the fabrication of the items to the manufacturer's production crew.

Shop Drawings



Landscape Drawings



Garden design and landscape planning is the art of designing and creating plans for the layout of plants, gardens and landscapes.

Most professional garden designers are trained in principles of design and in horticulture, and have an expert knowledge and experience of using plants.

Some professional garden designers are also landscape architects, a more formal level of training that usually requires an advanced degree and often a state license. ➤

Building Drawings

Working Drawings >

- » A building or construction project requires a complete set of specialised drawings. These drawings, called a project set, are used by the local planning department and building control, as well as by builders, joiners, plumbers, electricians and water, gas and telephone engineers.
- » The buildings are designed by an architect with a team of technicians and surveyors to help plan and produce the drawings.
- » Drawings for new buildings require approval from the building control department and the planning department before construction work can begin. The building control department checks that the quality of design and construction meet the standards/ byelaws. The planning department assesses whether or not the style and proportions of the proposed building are appropriate for the location.

Introduction



Depending upon the purpose they serve, construction/ working drawings include:

- » **Architectural Drawings:** Architectural drawing can be termed as the mother drawing for all the other drawings used for construction
- » Structural Drawings
- » Electrical Drawings
- » Plumbing Drawings
- » Finishing/ Detail Drawings

Other Drawings:

- » Mechanical drawings
- » Civil drawings

- » Traditionally, **working drawings** consist of two-dimensional orthogonal projections of the building or component they are describing, such as plans, sections and elevations

What do working drawings include? >

Main Parts of Drawing Set



Title Sheet

Owner's Name
ABC

Project Title
XYZ

Sheet Content
Architectural Drawings



Date: 18 February, 2018

Designed By:

Drawn By:

Checked By:

Drawing No. : A-102

Street Address

Phone Number: +92-
www.desquarearch.com

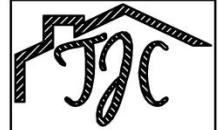


List of Drawings

S/No.	Dwg #	Drawing Title	Scale
1	A-100	GENERAL NOTES	
2	A-101	SITE PLAN	1/8" = 1'-0"
3	A-102	BASEMENT FLOOR PLAN	1/8" = 1'-0"
4	A-103	GROUND FLOOR PLAN	1/8" = 1'-0"
5	A-104	FIRST FLOOR PLAN	1/8" = 1'-0"
6	A-105	NORTH ELEVATION & EAST ELEVATION	1/8" = 1'-0"
7	A-106	WEST ELEVATION & SOUTH ELEVATION	1/8" = 1'-0"
8	A-107	SECTION AT A-A & SECTION AT B-B	1/8" = 1'-0"
9	A-108	SECTION AT C-C & DETAILS OF BOUNDARY WALL	1/8" & 1/4" = 1'-0"
10	A-109	DETAILS OF STAIRS	1/4" = 1'-0"
11	A-110	DETAILS OF KITCHEN & O.H.W.T	1/4" = 1'-0"
12	A-111	ARCHITECTURAL DETAILS	1/2" = 1'-0"
13	A-112	DETAIL OF DOORS & WINDOWS	1/4" = 1'-0"
14	A-113	DETAILS OF WARDROBES	1/2" = 1'-0"
15	F-101	BASEMENT FLOOR FURNITURE LAYOUT PLAN	1/8" = 1'-0"
16	F-102	GROUND FLOOR FURNITURE LAYOUT PLAN	1/8" = 1'-0"
17	F-103	FIRST FLOOR FURNITURE LAYOUT PLAN	1/8" = 1'-0"
18	S-101	GENERAL STRUCTURAL NOTES	
19	S-102	GROUND FLOOR EXCAVATION PLAN (CENTER LINES)	1/8" = 1'-0"
20	S-103	GROUND FLOOR EXCAVATION PLAN	1/8" = 1'-0"
21	S-104	DETAILS OF FOOTINGS & COLUMNS	1/2" = 1'-0"
22	S-105	BASEMENT FLOOR SLAB REINFORCEMENT PLAN	1/8" = 1'-0"
23	S-106	GROUND FLOOR SLAB REINFORCEMENT PLAN	1/8" = 1'-0"
24	S-107	FIRST FLOOR SLAB REINFORCEMENT PLAN	1/8" = 1'-0"
25	S-108	DETAILS OF BEAMS, O.H.W.T & STAIRS REINFORCEMENT	1/2" = 1'-0"
26	E-101	GENERAL ELECTRICAL NOTES	
27	E-102	BASEMENT FLOOR ELECTRICAL PLAN	1/8" = 1'-0"
28	E-103	GROUND FLOOR ELECTRICAL PLAN	1/8" = 1'-0"
29	E-104	FIRST FLOOR ELECTRICAL PLAN	1/8" = 1'-0"
30	PH-101	GENERAL PLUMBING NOTES	
31	PH-102	BASEMENT FLOOR SEWER PLAN	1/8" = 1'-0"
32	PH-103	GROUND FLOOR SEWER PLAN	1/8" = 1'-0"
33	PH-104	FIRST FLOOR SEWER PLAN	1/8" = 1'-0"
34	PH-105	DETAILS OF BATHROOMS, SEPTIC TANK & MAN HOLE	1/4" = 1'-0"
35	PH-106	TOP ROOF DRAINAGE & WATER SUPPLY PLAN	1/8" = 1'-0"

IMPORTANT NOTES :-

Sizes must be measured by the given scale where dimensions are not written. The contractor shall contact the consultant through the Engineer In-Charge for any query or encumbrance. These drawings are sole property of WADAAN Consulting Associates. Production of the whole or any part there of would lead to violation of Copyright Act Govt. of Pakistan.



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Owner's Name
KAMRAN YOUNAS

Project Name
RESIDENCE AT
PESHAWAR CITY

Sheet Content
Construction
Drawings
Specification



Printing Date APR 2017

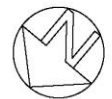
Designed By Tariq Jamil

Drawn by Fawad Khan

Signature

DRAWING NO.

ARCHITECTURE











GENERAL NOTES:

1. GENERAL, Architectural











- 1.1) These General Notes are instructions to the Contractor and apply generally to all the work unless more specific information is shown in drawings.
- 1.2) All construction works shall be carried out in accordance with the most current drawings.
- 1.3) An approved set of plans shall be maintained on the job site at all times.
- 1.4) All works shall conform to the best practice of each trade. Unless shown or noted otherwise, construction details or practices are common to the standard of the trade.
- 1.5) All works shall conform to the applicable codes and authority rules.
- 1.6) The Contractor shall obtain the necessary permits required for the works shown on these drawings prior to the start of the construction.
- 1.7) The Contractor shall locate and uncover all the underground utilities in advance of the construction.
- 1.8) Backfilling shall not be started until newly installed underground equipment is checked and approved by the engineers to verify their identity and their correct position.
- 1.9) Backfill shall be installed in accordance with the relevant ruling standards.
- 1.10) Disposal of/and stockpiling of excess material within the planning area shall be done in such a way that it shall not create nuisance to the ongoing works in general and the neighboring areas.
- 1.11) The Contractor shall not trespass beyond the project boundary lines unless a permit or written authorization has been obtained from the neighboring property owners involved.
- 1.12) All dimensions and levels are in feet-inches (0'-0") unless mentioned otherwise.
- 1.13) The Contractor shall check and verify all dimensions and levels on site (both new and existing) and report discrepancies to the Architect/Engineer prior to proceeding of works.
- 1.14) The drawing shall not be scaled. Only written dimensions shall be followed. The Contractor shall through project engineer request, from the Architect, necessary dimensions not shown on the drawings.
- 1.15) All Architectural drawings shall be read in conjunction with the Structural, Services drawings and specifications for proper coordination. Any discrepancies shall be brought to the attention of the Engineer.
- 1.16) All dimensions other than levels are given to structural elements. Dimensions are taken from and to centerlines of columns, beams, and other structural elements; from faces of walls and edges of openings unless shown otherwise.
- 1.17) All levels shown in the drawing are top of the slab levels.
- 1.18) Contractor shall submit shop drawings "For Approval" prior to fabrication where required by Architect/Engineer.
- 1.19) Separate floor plans are provided showing room tags working dimensions and furniture/fixture layouts respectively.














































SYMBOLS:

1. GENERAL SYMBOLS

	SECTION ARROW TOP - Section Identification letter BOTT - Dwg on which Section is drawn
	VIEW ARROW TOP - View Identification letter BOTT - Dwg on Which View is drawn
	DETAIL TOP - Detail Identification number BOTT - Dwg on with Detail is drawn
	GRID HOR - Grid Identification letter VERT - Grid Identification number (NOTE: When multiple Bldg's add. Bldg No in front of Grid 101)
	Elevation Identification in Plan
	Elevation Identification in Section and Elevation
ROOM	Room Identification number or name
	Door Identification number
	Window Identification number

2. OTHER SYMBOLS

	STONE
	REINFORCED COLUMNS
	REINFORCED CONCRETE
	BRICK WALL
	SAND / MORTAR
	GRASS
	PAVING
	RUBBLE
	COMPACTED FILL OR NATURAL GROUND
	ROOF TOP

	Grid, center line		Match line, M.L.		Ramp
	Hidden, object above or beyond		Revision cloud		Slope Direction
	Exterior Wall Composition		Floor Level drop		Folding door or gate
	Curtain wall		Glass Wall		Double leaf door
	Glass Blocks		Sliding or automatic door		Window
	DPC, Damp Proof Course (Membrane)		Reference Point		Tree
	Insulation		Existing Tree		Cabinet, built in closet
	Lockers		Cooker		Entry, Exit
	Single leaf door		Refrigerator		Hinge side
	Door sash in elevation		Washing machine		Sash opening direction
	Staircase		Kitchen sink, double		Hinge side
	Indication Up		Kitchen sink, single		Floor Drain
	WC, Water Closet		Service sink		Wall Mounted Water Closet
	Squat Pan		Wash basin, Hand wash basin		Shower
	Shaft, duct		Bath Tub		Bath Tub

Architectural Symbols >

Some of the symbols used in Floor Plans



Window



Pair of Windows



French or Twin Doors



Sliding Doors



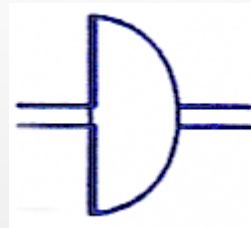
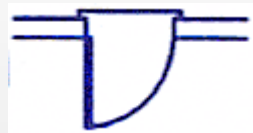
Accordion-Fold
Doors



Pocket Doors



Bi-Fold Doors



Regular Doors

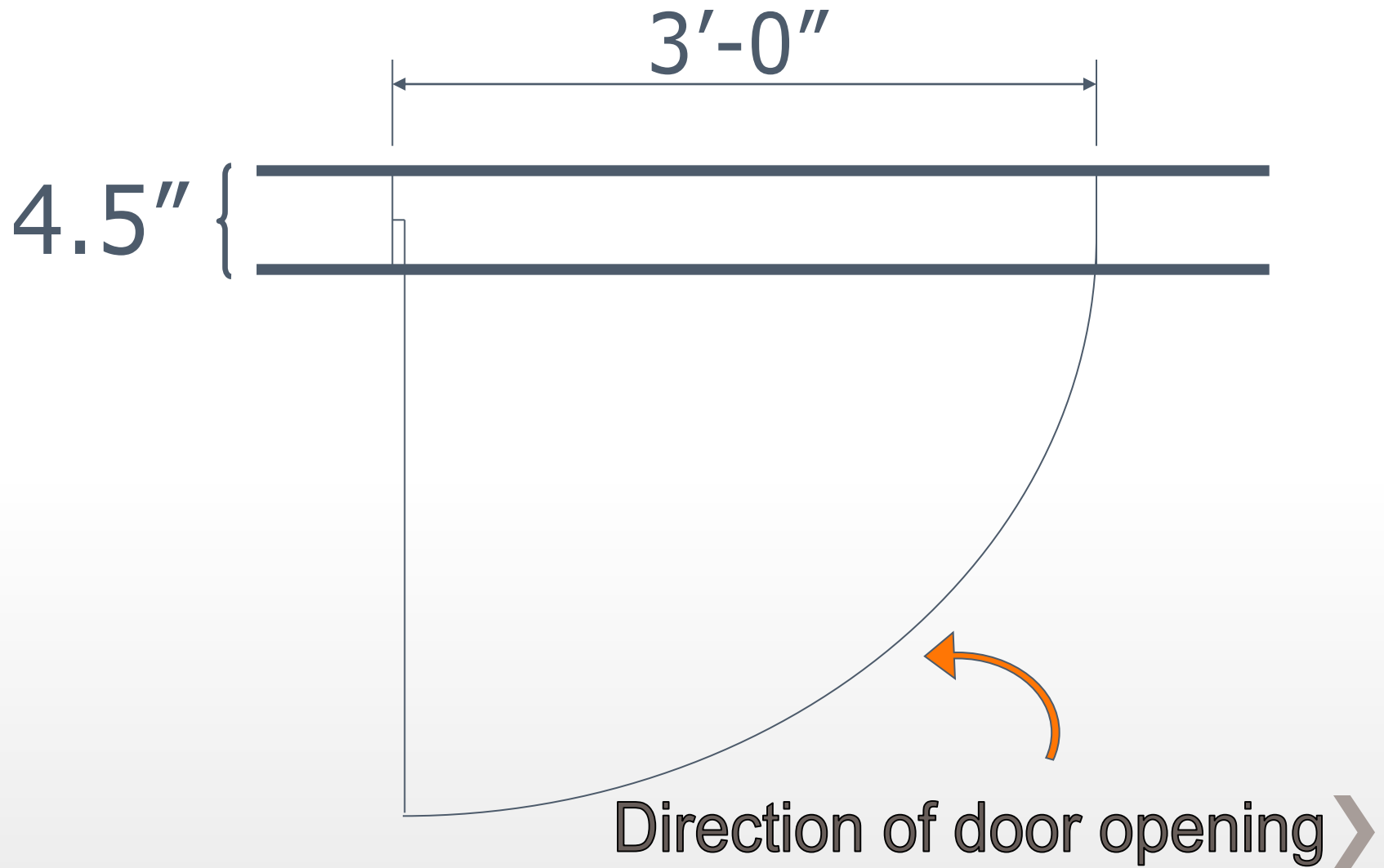


- » The height for all passage **doors** must be a minimum of **6'-6"** and the standard width sizes for interior **doors** are 24", 28", 30", 32" and 36". The minimum recommended **door** width to allow persons with disabilities' to pass through is **36 inches**
- » **Door frame size**
- » The average **measurement** of 3'-0" by 6'-6" inches refers to the **door** panel itself, not including the **frame**. The **frame** extends beyond the panel, and is installed into the rough opening.
- » Door Frame: 4" x 4"

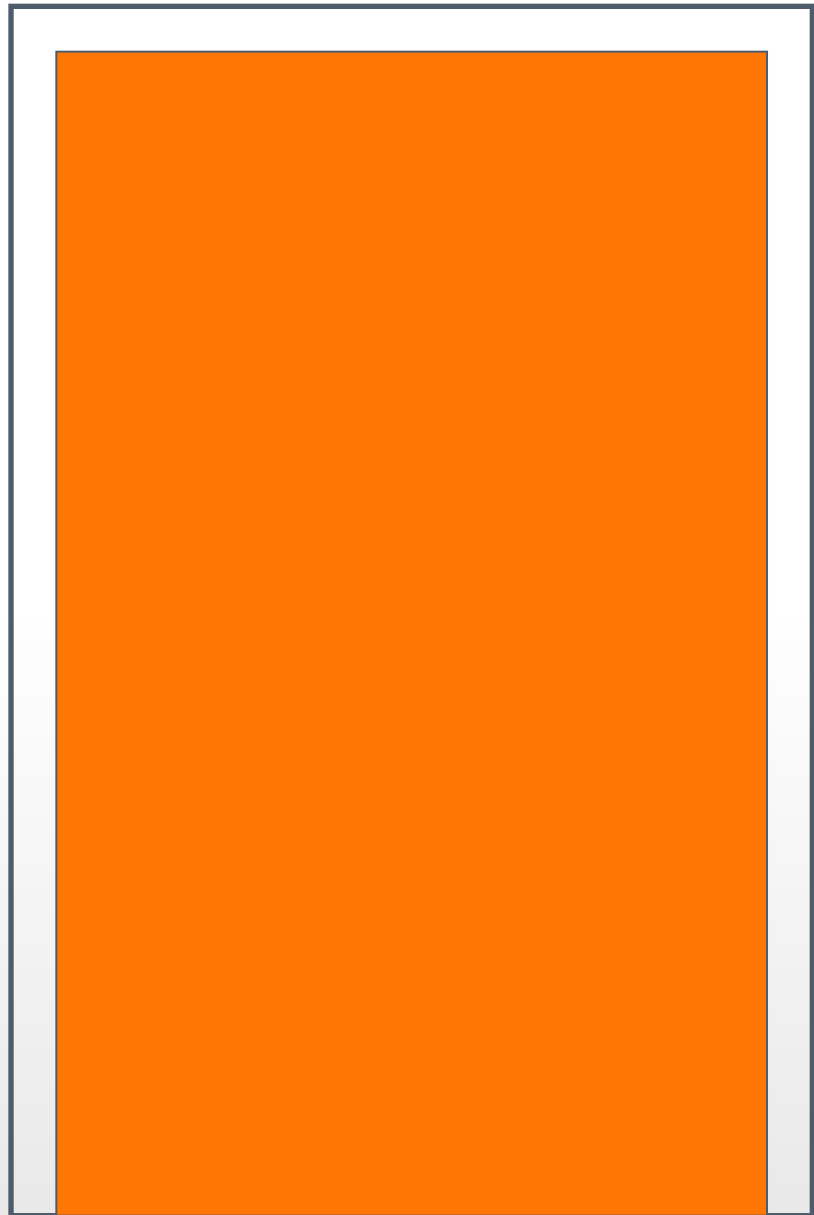
Standard Door Size



Door Detail



Door Details

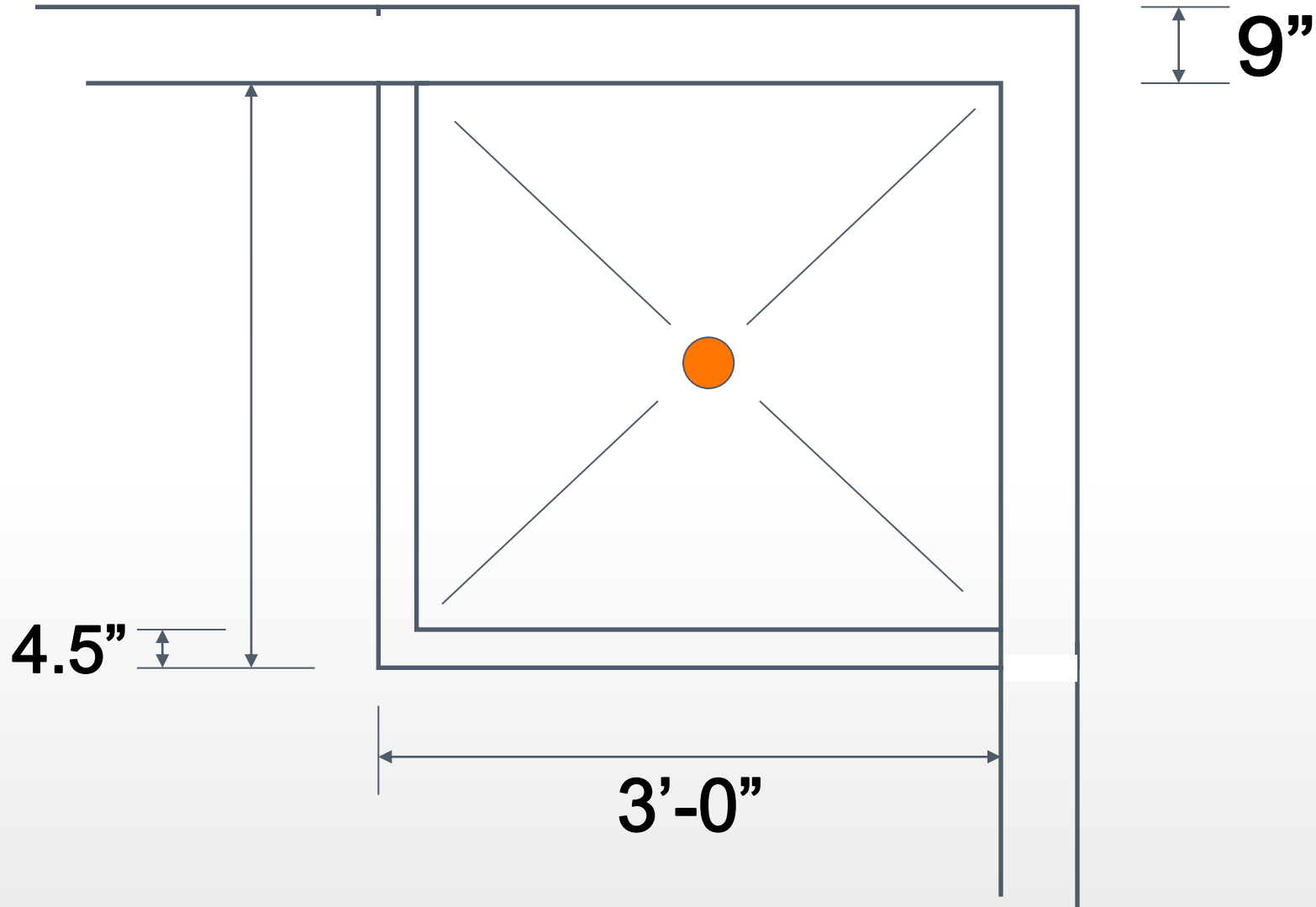


2" Door Frame

7'-0"

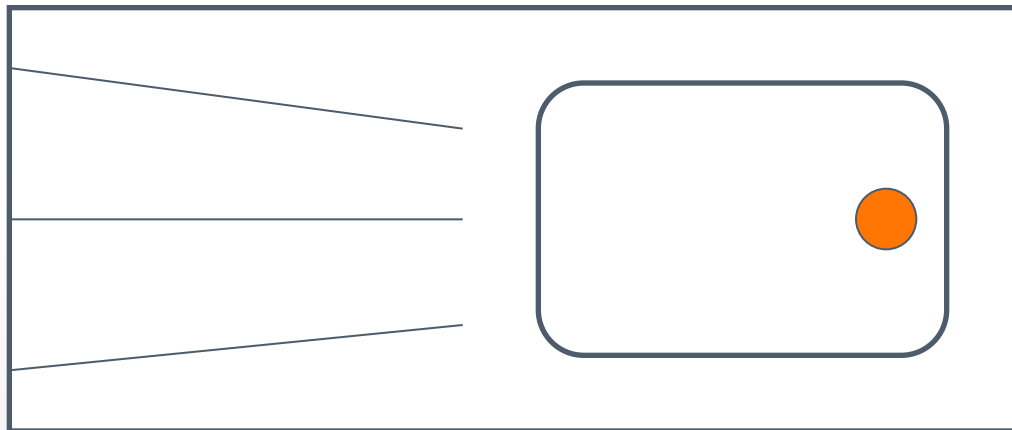


Shower

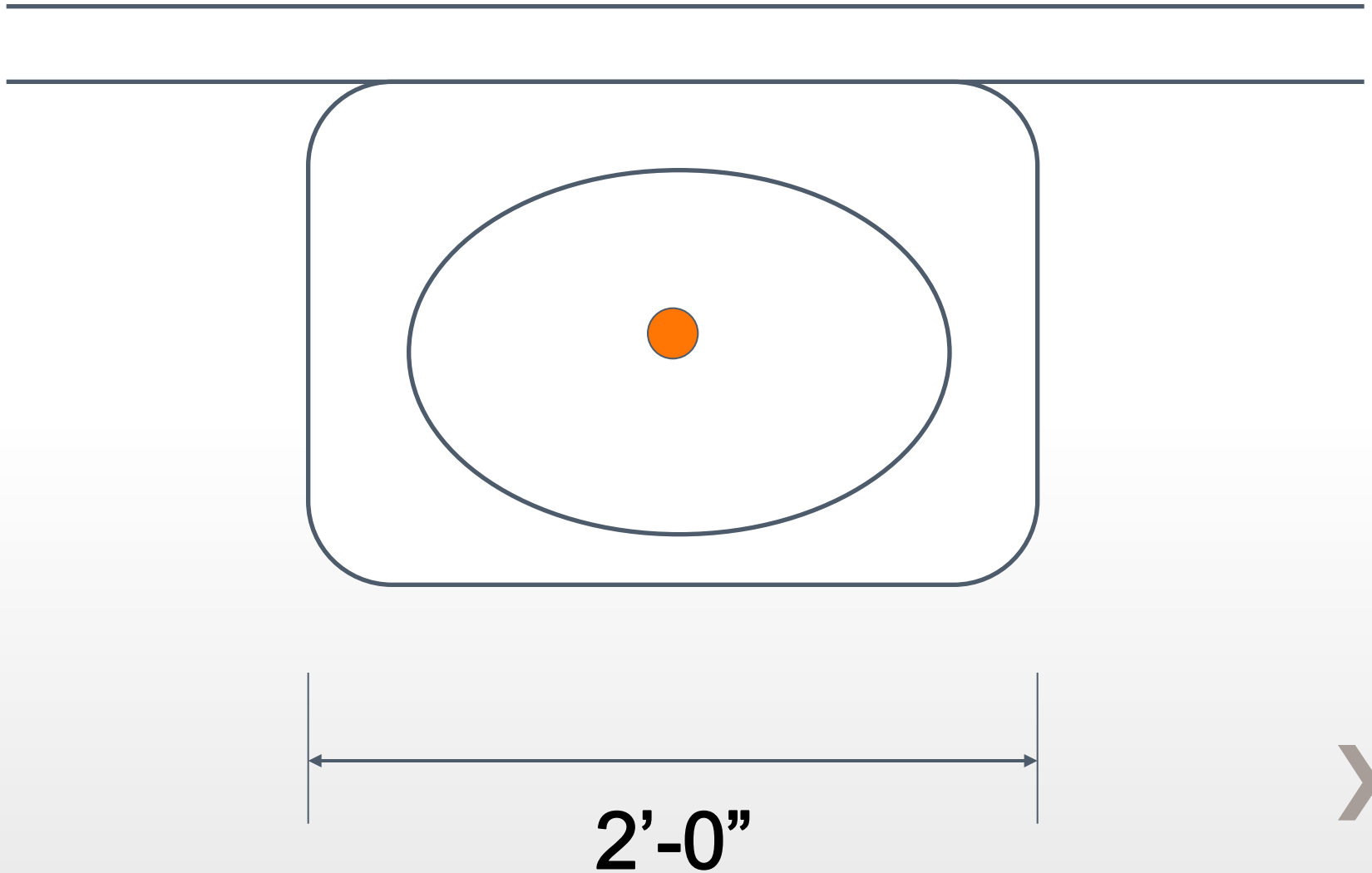


Kitchen Sink

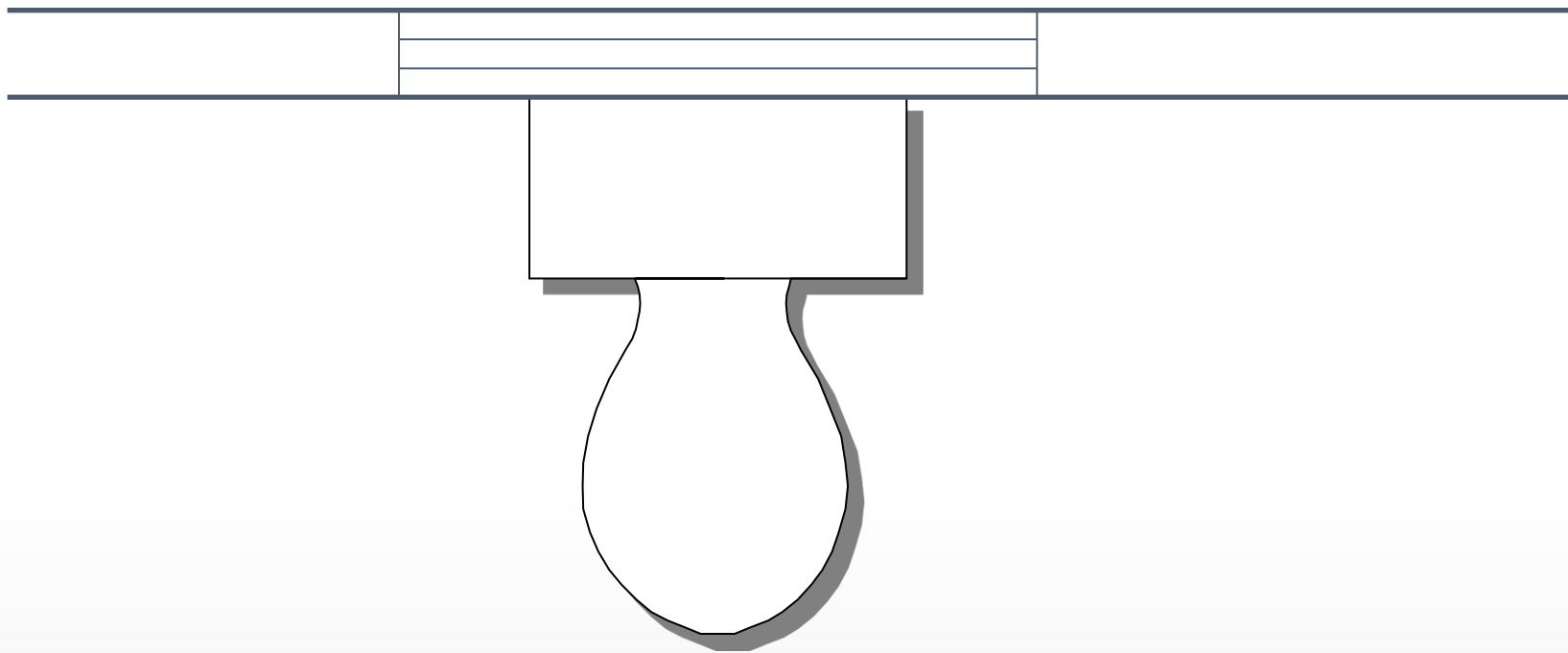
Standard Sizes: 3 to 7 Feet

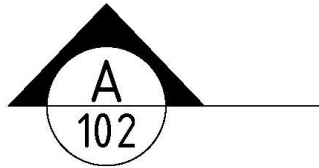


Wash Basin



Toilet

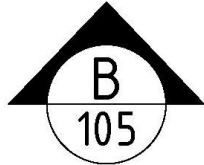




SECTION ARROW

TOP - Section Identification letter

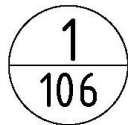
BOTT - Dwg on which Section is drawn



VIEW ARROW

TOP - View Identification letter

BOTT - Dwg on Which View is drawn

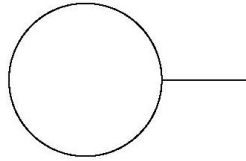


DETAIL

TOP - Detail Identification number

BOTT - Dwg on with Detail is drawn

Architectural Symbols >

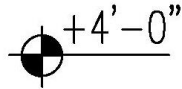


GRID

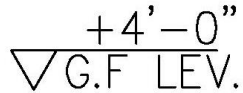
HOR - Grid Identification letter

VERT - Grid Identification number

(NOTE: When multiple Bldg's add. Bldg No in front of Grid 101)



Elevation Identification in Plan



Elevation Identification in Section and Elevation

ROOM

Room Identification number or name

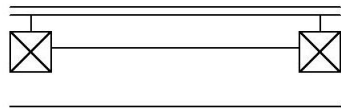


Door Identification number

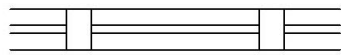


Window Identification number

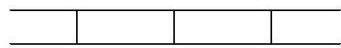
Architectural Symbols >



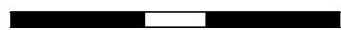
Curtain wall



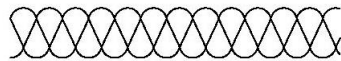
Glass Wall



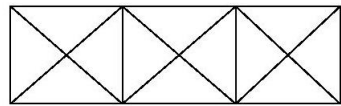
Glass Blocks



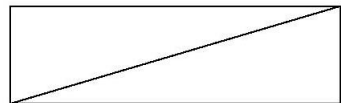
DPC, Damp Proof
Course (Membrane)



Insulation






Lockers



Cabinet, built in closet

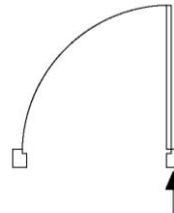
Architectural Symbols >

	Grid, center line
	Match line, M.l.
	Hidden, object above or beyond

Architectural Symbols >

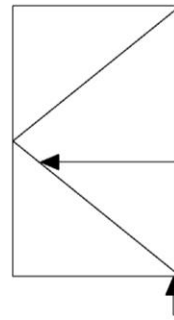


Entry, Exit



Single leaf door

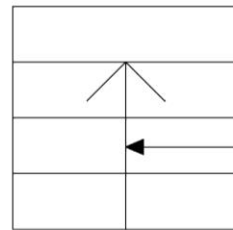
Hinge side



Door sash in elevation

Sash opening direction

Hinge side



Staircase

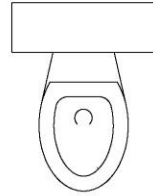
Indication Up

UP

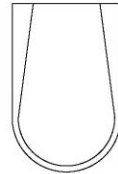
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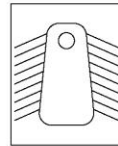
Floor Drain



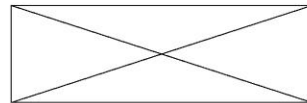
WC, Water Closet



Wall Mounted Water Closet

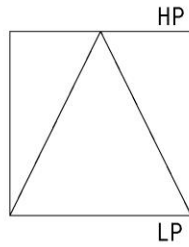


Squat Pan



Shaft, duct

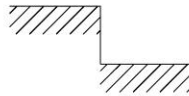
Architectural Symbols >



Ramp



Slope Direction



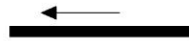
Floor level drop



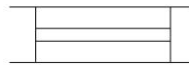
Folding door or gate



Double leaf door



Sliding or automatic door

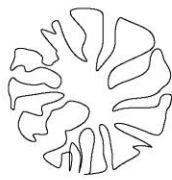


Window

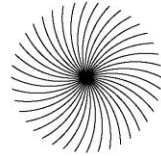


Reference Point

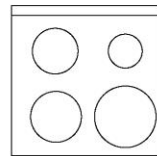
Architectural Symbols >



Tree



Existing Tree



Cooker

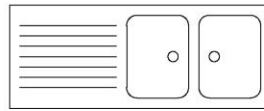


Refrigerator

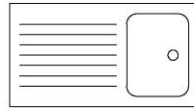


Washing machine

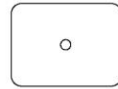
Architectural Symbols >



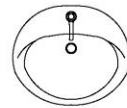
Kitchen sink, double



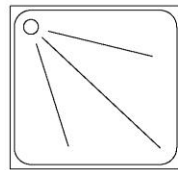
Kitchen sink, single



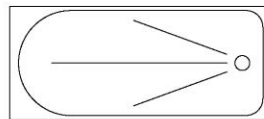
Service sink



Wash basin, Hand wash basin

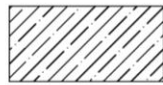


Shower



Bath Tub

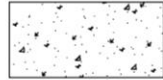
Architectural Symbols >



STONE



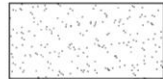
REINFORCED COLUMNS



REINFORCED CONCRETE



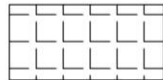
BRICK WALL



SAND / MORTAR



GRASS



PAVING



RUBBLE



COMPACTED FILL OR NATURAL GROUND



ROOF TOP

Architectural Symbols >