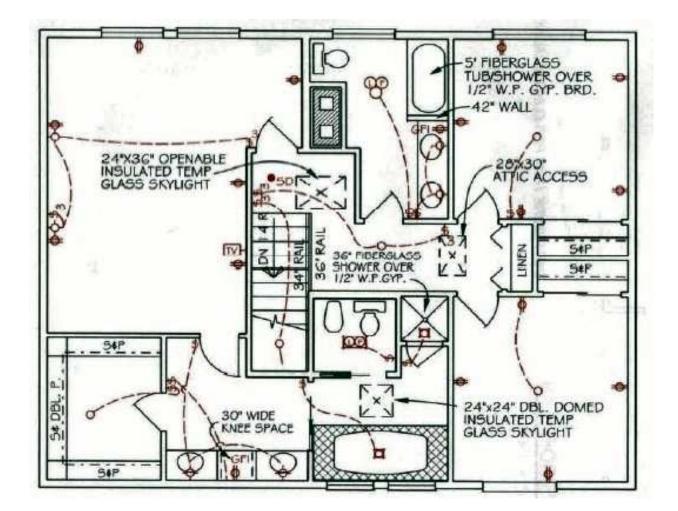
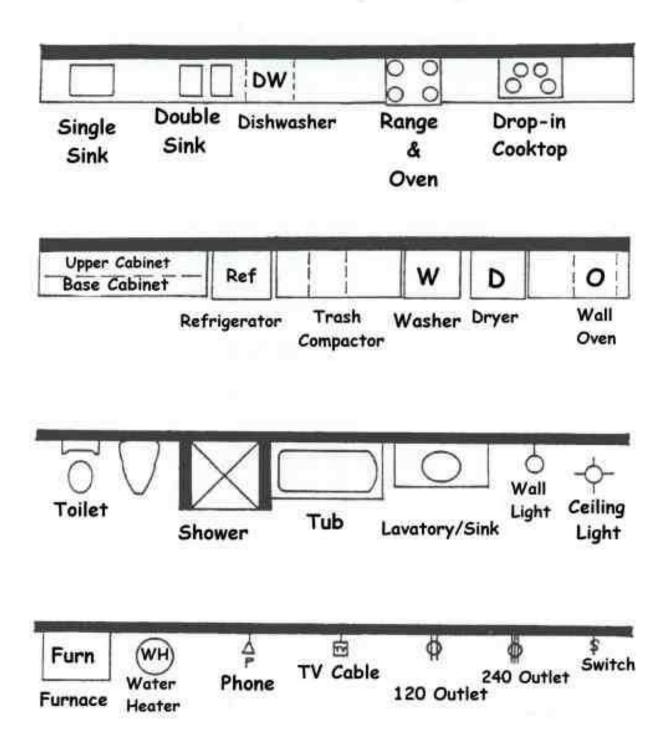
## **Blueprint symbols**

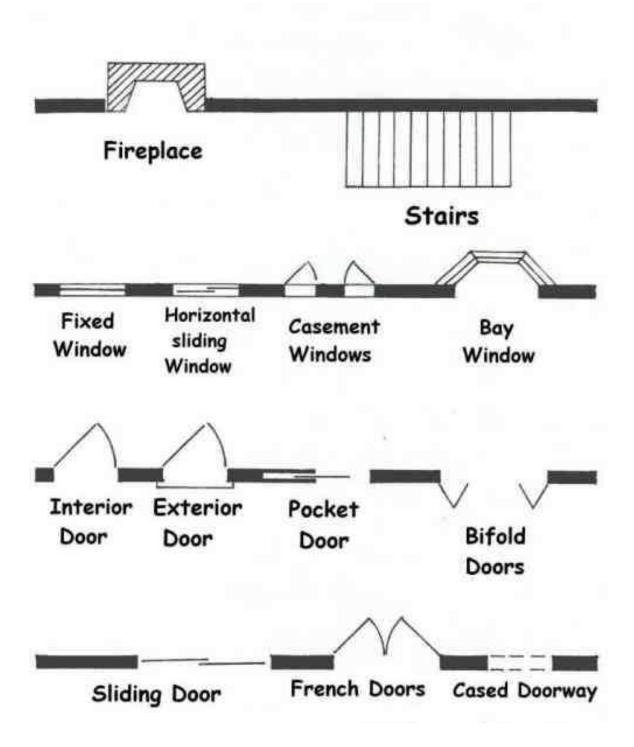
Here is a list of all the blueprint symbols that are needed to make architectural, electrical and plumbing blueprints. Because of the scale, many of these symbols are hard to see on real blueprints. The electrical floor plan map below shows some of the symbols used by electricians.



Let's start out with the Architectural symbols because they are usually bigger and they will be drawn into floor plans first. These are things like doors, windows, stairs, walls, cabinets and sinks.

## Architectural Blueprint Symbols





Here are the electrical symbols including communications symbols like phones, doorbells, and security systems.

We'll start out with electrical switches.

E 語「丁 S<sub>MTO</sub> S<sub>MC</sub> S ٠ ٠ P PE PES SPO

Fused switch, wall mounted Fused safety switch xxAF= frame size xxAT= trip size Key controlled switch, wall mounted Low voltage switch, wall mounted Low voltage master switch, wall mounted Manual motor switch. wall mounted Manual motor switch, with thermal overloads wall mounted Momentary contact Intermittent switch, wall mounted Motion detector sensor

Photoelectric switch

Pilot/remote light switch load off, wall mounted Pilot/remote light switch load on, wall mounted Remote control switch receiver, wall mounted

Ceiling pull switch ceiling mounted Chain pull switch

SS'S<sup>™</sup>S'S'S<sup>™</sup>S' TC S S WCB Swp N N 160 E

LA5-2.6

Single pole switch, wall mounted Switch with locator lamp glow, wall mounted Thermal rated motor switch

Thermostat

Three-way switch, wall mounted

Timer or motor switch with thermal overload wall mounted

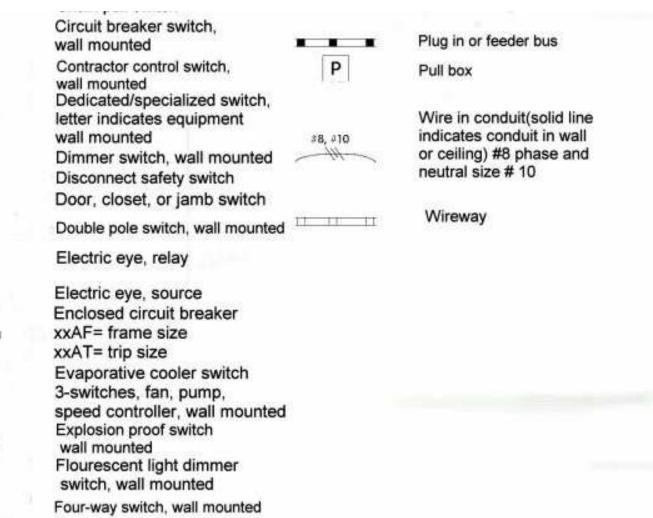
Time clock switch

Variable speed or volume control switch, wall mounted

Wall bracket pull switch

Weather proof circuit breaker, wall mounted Weather proof switch, wall mounted Cable tray Conduit turning up Conduit turning down Conduit with capped end Emergency circuit Exposed circuit

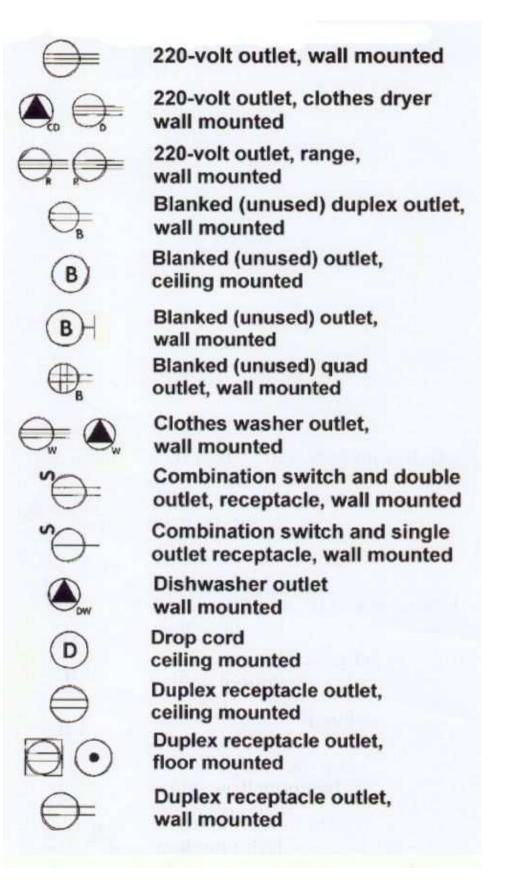
Homerun to panel letters indicate panel numbers indicate circuits



There are many different types of electrical switches. It can be a bit confusing if you just look at blueprints without studying what each symbol represents. Most of the symbols on these pages will be rarely used. The switches that are commonly used are the single pole, the three-way, double pole, circuit breaker, four-way, and dimmers, just to name a few.

Floor plans will have a lot of common switches so look at the symbols list and find the most common switches. These are the ones to pay attention to.

Next up, we'll go over many of the electrical out let symbols.



Duplex receptacle outlet with GFI or GFCI device, wall mounted

Duplex receptacle outlet, isolated ground, wall mounted

Duplex receptacle outlet, split wired, wall mounted

Duplex special purpose outlet

Emergency outlet, wall mounted

Garbage disposal outlet, wall mounted

General outlet, ceiling mounted

General outlet, wall mounted

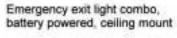
Junction box, ceiling mounted

Junction box, wall mounted Lamp holder, ceiling mounted Next we will cover electrical symbols for fixtures.

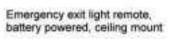


Emergency exit light combo, battery powered, wall mount

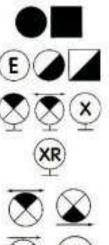






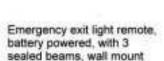












Emergency lighting on critical power circuit

Emergency lighting on emergency life safety branch

Exit light, wall mounted arrow indicates exit

Exit light, recessed wall mounted

Exit light, shaded area indicates number of faces shown, arrow indicates exit no arrow when directly over an exit door

Flourescent fixture, ceiling mounted







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Flourescent lighting fixture, wall mounted

Flourescent lighting fixture, channel mount, ceiling mounted

Flourescent lighting fixture, number of tubes, ceiling mount

Flourescent lighting fixture, number of tubes, wall mount

Flourescent lighting fixture, mod wired in series wall mount

Flourescent lighting fixture, pendant style, ceiling mount

Same as above, wall mount

Flourescent lighting fixture recessed style ceiling mount



O

Flourescent lighting fixture surface mount with outlet box, ceiling mount



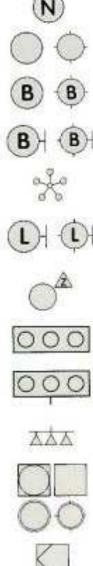
Flourescent lighting fixture on critical branch circuit



Flourescent lighting fixture on emergency circuit

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Flourescent fixtures continuous row



Illuminated house number, wall mount

Incandescent lighting fixture, ceiling mounted

Incandescent lighting fixture, blank, unused ceiling mounted

Incandescent lighting fixture, blank, unused wall mounted

Incandescent lighting fixture, chandelier, ceiling mounted

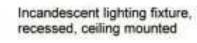
Incandescent lighting fixture, controlled by low voltage switch relay in box, wall mounted

Incandescent lighting fixture, letter in triangle is reference to key, ceiling mounted

Incandescent lighting fixture, mirror lights, ceiling mounted

Incandescent lighting fixture, mirror/vanity lights, wall mounted

Incandescent lighting fixture, multiple flood lights, wall mounted



Incandescent lighting fixture, recessed directional light fixture, ceiling mounted



Incandescent lighting fixture, rough-in only, ceiling mounted

Incandescent lighting fixture, spot light, ceiling mounted

Incandescent lighting fixture, heat lamp, ceiling mounted



Incandescent llighting standard uppercase = key, number= circuit number, switch control



Incandescent lighting fixture surface directional light wall mounted

Incandescent lighting fixture, track lighting Incandescent lighting fixture underwater recessed, bottom fixture



Incandescent lighting fixture underwater recessed, wall mounted

Incandescent lighting fixture underwater up beam bottom mounted Incandescent lighting fixture

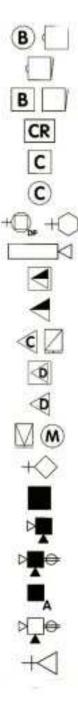
fan ceiling mounted

Wall fan

Incandescent lighting with pull switch, wall mounted



## Finally, for the electrical symbols, we have the communications symbols.





Sound system devices. general symbol Sound system speaker recessed Sound system speaker S wall mounted Sound system volume control, wall mounted Special auxilliary outlets letter refers to key Telephone public general symbol, letter=key Telephone outlet Telephone outlet, Private, floor mounted Telephone outlet, Public, floor mounted Telephone terminal cabinet Telephone terminal cabinet, wall mounted TV (CATV) outlet TV antenna devices wall mounted Volume control Watchman system devices wall mounted G Yard bell or chime

Public telephone, wall mount

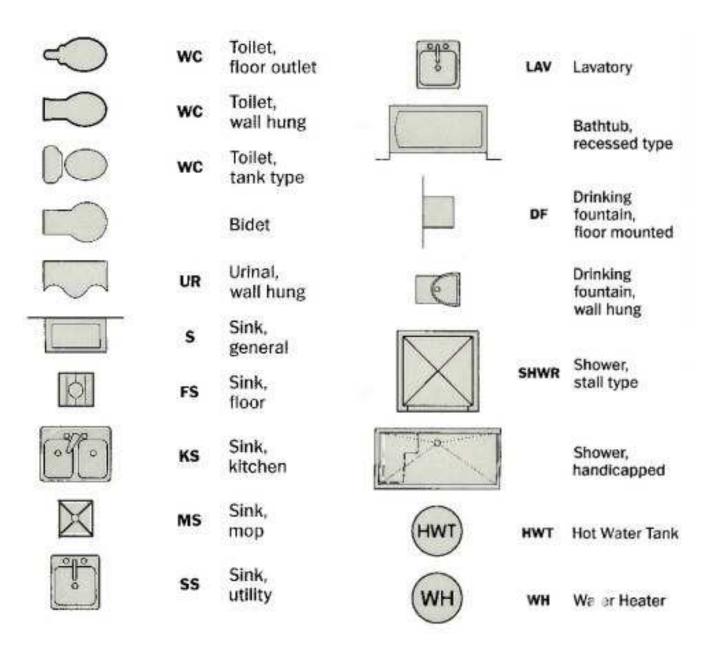
Signal central station device

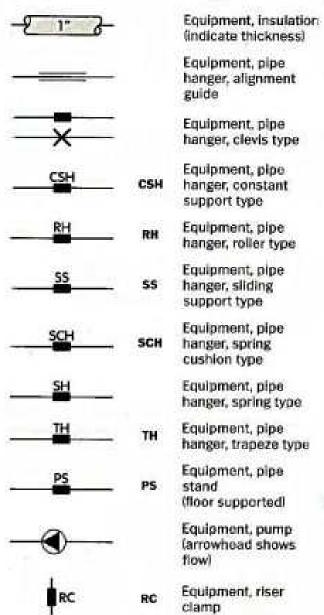
Signal system device

Sound system devices, wall mount

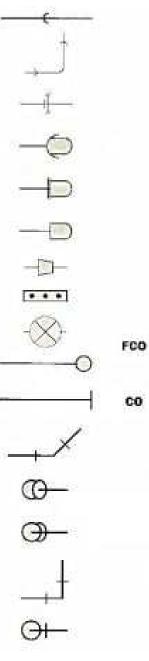
Push button switch

Last up we have the plumbing symbols. Just like the electrical symbols, there are a lot of plumbing symbols, but only a few of them are commonly used.





(indicate thickness) Equipment, pipe hanger, alignment guide Equipment, pipe hanger, clevis type Equipment, pipe hanger, constant support type Equipment, pipe hanger, roller type Equipment, pipe hanger, sliding support type Equipment, pipe hanger, spring cushion type Equipment, pipe hanger, spring type Equipment, pipe



Fitting, bell & spigot

Fitting, bulkhead flange

Fitting, bull plug, bell and spigot

Fitting, bull plug, flanged

Fitting, bull plug, screwed

Fitting, bushing

Fitting, choke nipple

Fitting, clean out, floor

Fitting, clean out, exposed

> Fitting, elbow, 45-degree

Fitting, elbow, 45-degree dropping

Fitting, elbow, 45-degree rising

Fitting, elbow, 90-degree

Fitting, elbow, 90degree turned down WB

Equipment, sedime t strainer

Equipment, straine basket type

Equipment, straine blow off type (with vaive)

Equipment, strainer, cone type

Equipment, strainer, continuous type

Equipment, strainer, T type

Equipment, strainer, temporary

Equipment, trap, generic

Equipment, trap, float

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Equipment, trap, running

Equipment, trap, vacuum

Equipment, wall

WB

FD

Fitting, elbow, 90degree turned down

Fitting, elbow, 90degree turned up

Fitting, elbow outlets: side and dow )

Fitting, elbow, outlets: side and up

Fitting, elbow, reducing

Fitting, expansion joint, bellows

Fitting, expansion joint, sliding

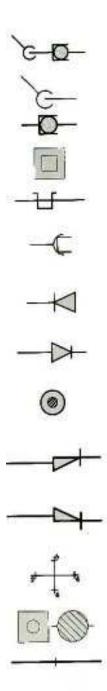
Fitting, flanged

Fitting, flexible connection

Fitting, floor drain

Fitting, flow straightener (flanged fitting shown)

Fitting, hose connector, quick-couple



Fitting, joint, double plane swing type

Fitting, joint, swing type or ball joint

Fitting, overflow

Fitting, Pete's plug

Fitting, pipe or cleanout plug, bell & spigot

Fitting, pipe or cleanout plug, screwed

Fitting, reducer, concentric

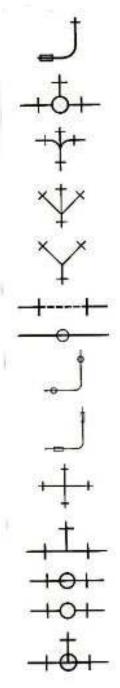
Fitting, reducer, concentric, rising or descending

Fitting, reducer, eccentric, straight crown

Fitting, reducer, eccentric, straight invert

Fitting, reducing cross

RD Fitting, roof drain



Fitting, sewer, street elbow

Fitting, sewer, tee (side outlet/outlet up)

Fitting, sewer, through double T-Y

Fitting, sewer, through double Y

WYE Fitting, sewer, true Y

Fitting, sleeve

Fitting, soldered

Fitting, solvent cement

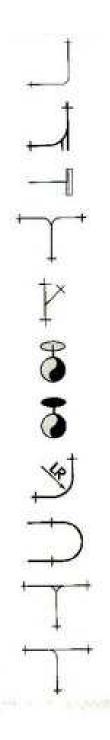
Fitting, straight size cross

Fitting, straight size tee

Fitting, tee down

Fitting, tee up

Fitting, tee, outlets: side and down



## Fitting, screwed

Fitting, sewer, 90degree base elbow

Fitting, sewer, blank flange

Fitting, sewer, double branch elbow

Fitting, sewer, lateral connection

Fitting, sewer, lateral connection: dropping

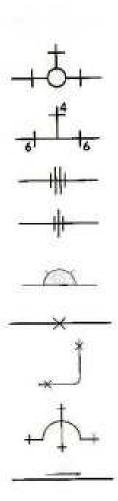
Fitting, sewer, lateral connection: rising

Fitting, sewer, long radius elbow

Fitting, sewer, return bend

Fitting, sewer, double sweep

Fitting, sewer, single sweep



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\_D 3:12

-R 3:12

Fitting, tee, outlets: side and up

Fitting, tee, reducing

Fitting, union, flanged

Fitting, union, screwed

Fitting, wall hydrant (2 connections shown)

W.H.

Fitting, welded

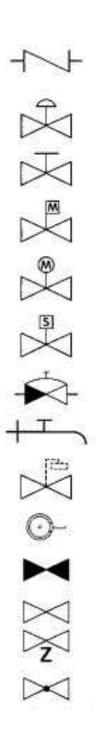
Piping, crossover Ino junction)

Piping, pipe

Piping, point of connection (old to new work)

Piping, sloped pipe, drop lindicated e.g. 1:24)

Piping, sloped pipe, rise (indicated e.g. 2:12)



Valve, check (also BFP called swing check or backflow preventer)

> Valve, control, diaphragm actuator

> Valve, control, hand actuator

Valve, control, motor operated

Valve, control, rotary actuated

Valve, control, solenoid operated

Valve, diaphragm type

Valve, faucet

Valve, float type

Valve, flush valve

GV Valve, gate type, normally closed

GV Valve, gate type, normally opened (abbrev. or letter refers to key)

Valve, globe type





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Valve, spring check type

Valve, stop check type

Valve, stop cock plug or cylinder type, 2-way

Valve, stop cock plug or cylinder type, 3-way/2-port

Valve, stop cock plug or cylinder type, 3-way/3-port

Valve, stop cock plug or cylinder type, 4-way/4-port

Valve, triple duty (flow, flow balance, backflow prevention)

Valve, V-ball type