

Unit 204: Common plumbing processes

Outcome 7

**Symbols used for identifying
plumbing pipework and fittings**

Symbols

BS1192



Gate valve



Stop valve



Service valve



Double check valve



Single check valve



Motorised zone valve



Safety/relief valve



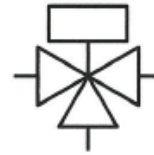
Drain valve

Symbols

BS1192



Radiator valve



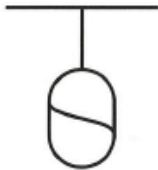
3-port motorised valve



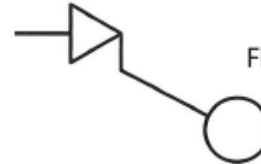
Pump



Water meter



Expansion vessel

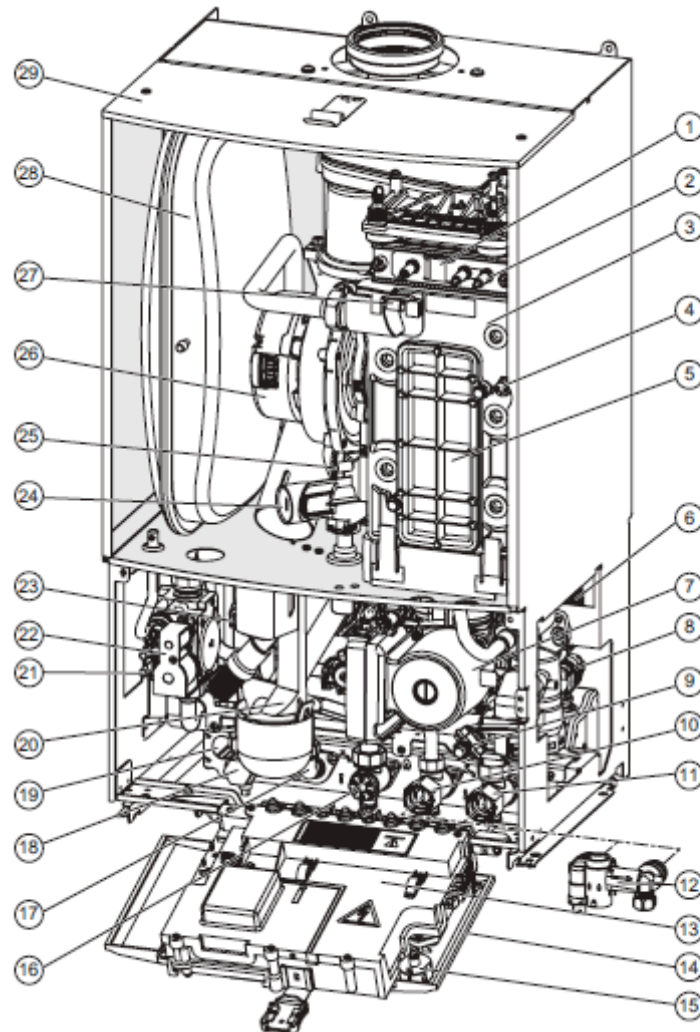


Float-operated valve

Symbols

Isometric: refers to 3D objects on plans

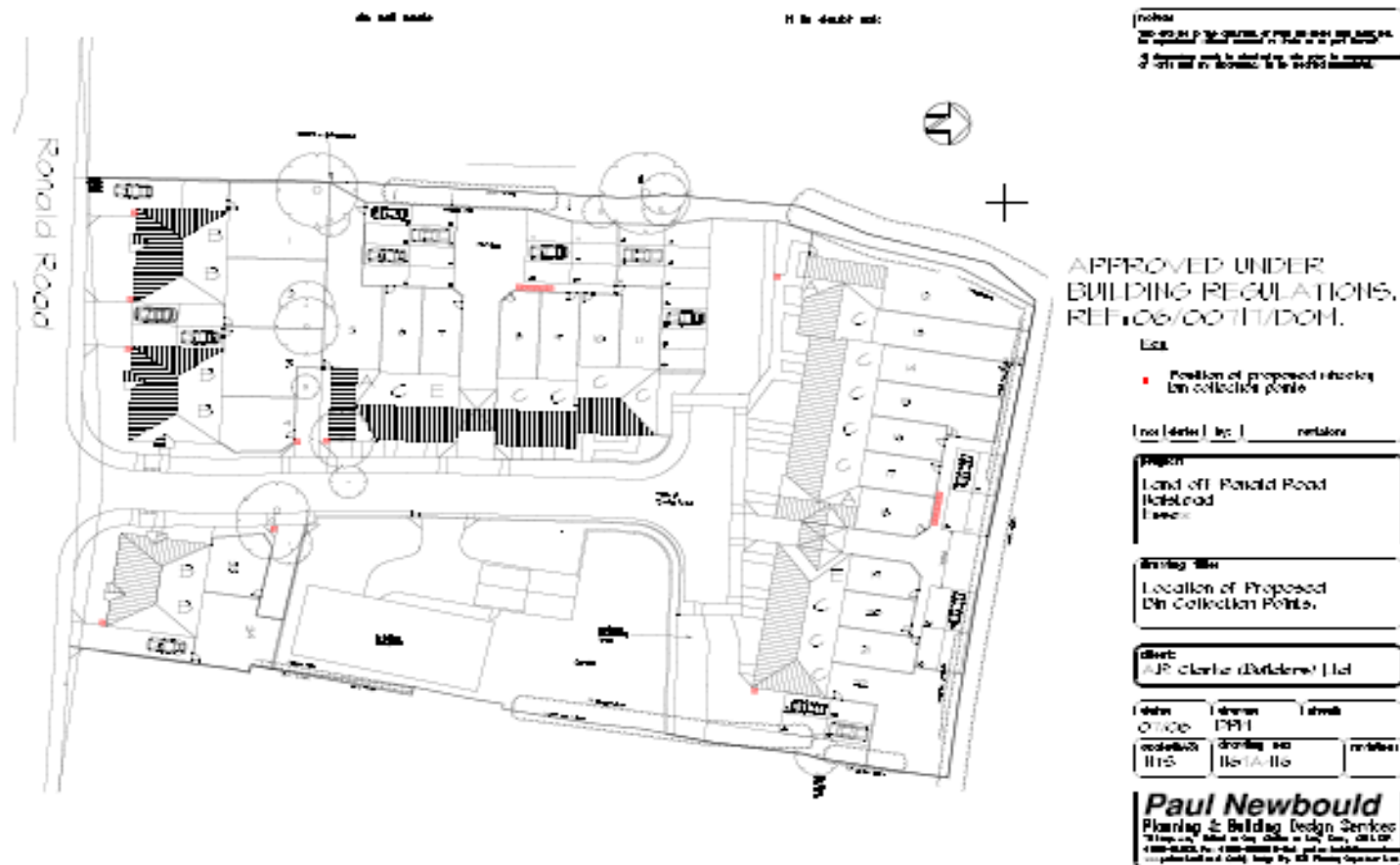
These are used by manufacturers to show spare parts, and also used by architects to show pipework layouts.



Symbols

Plans: Site plans

These show an area – generally the whole site – so you can locate a specific property and the access to it.



Symbols

Plans: Site plans

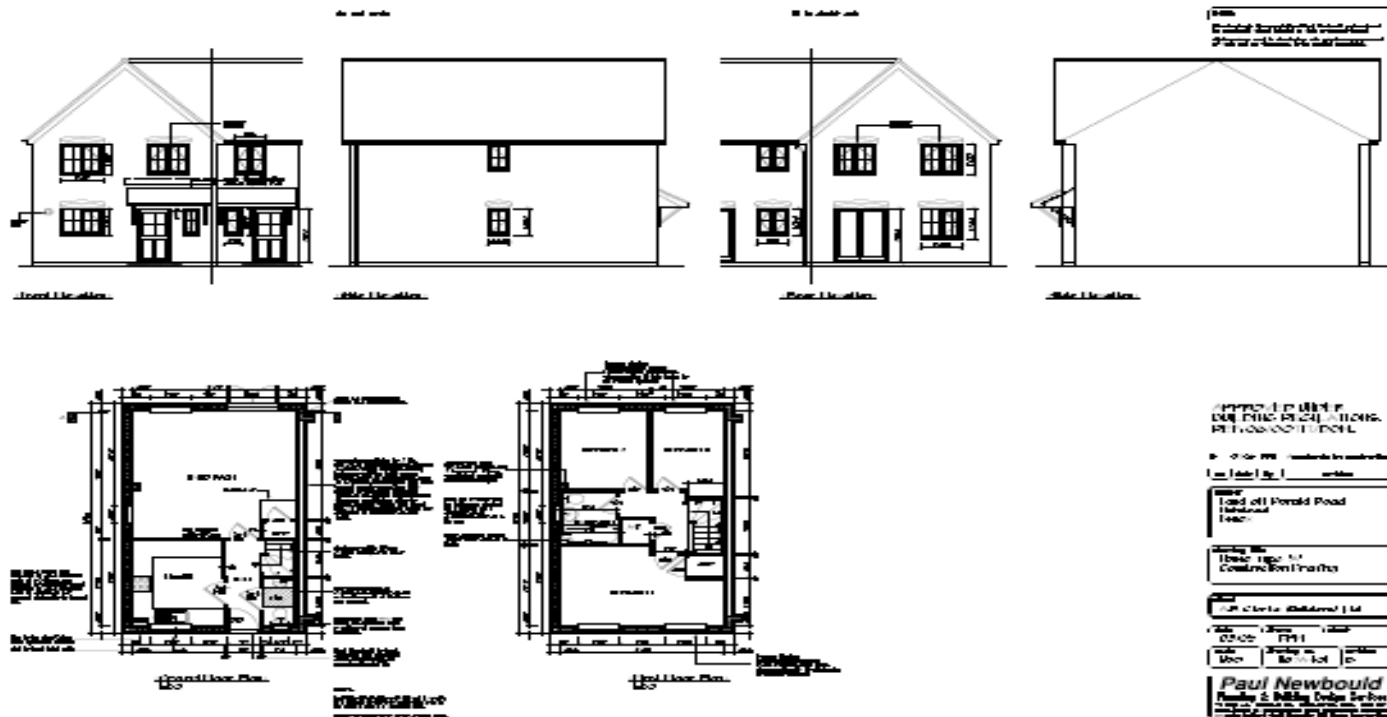
They can also be in colour. **Scale 1:500 or 1:1250**



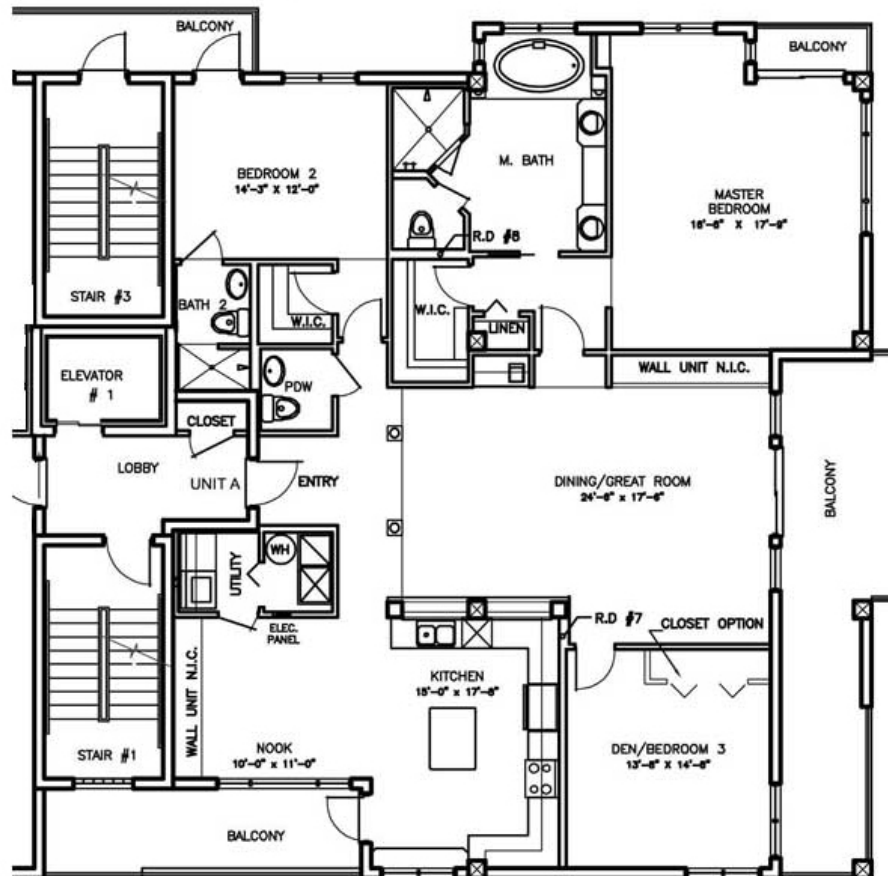
Symbols

Plans: Building plans

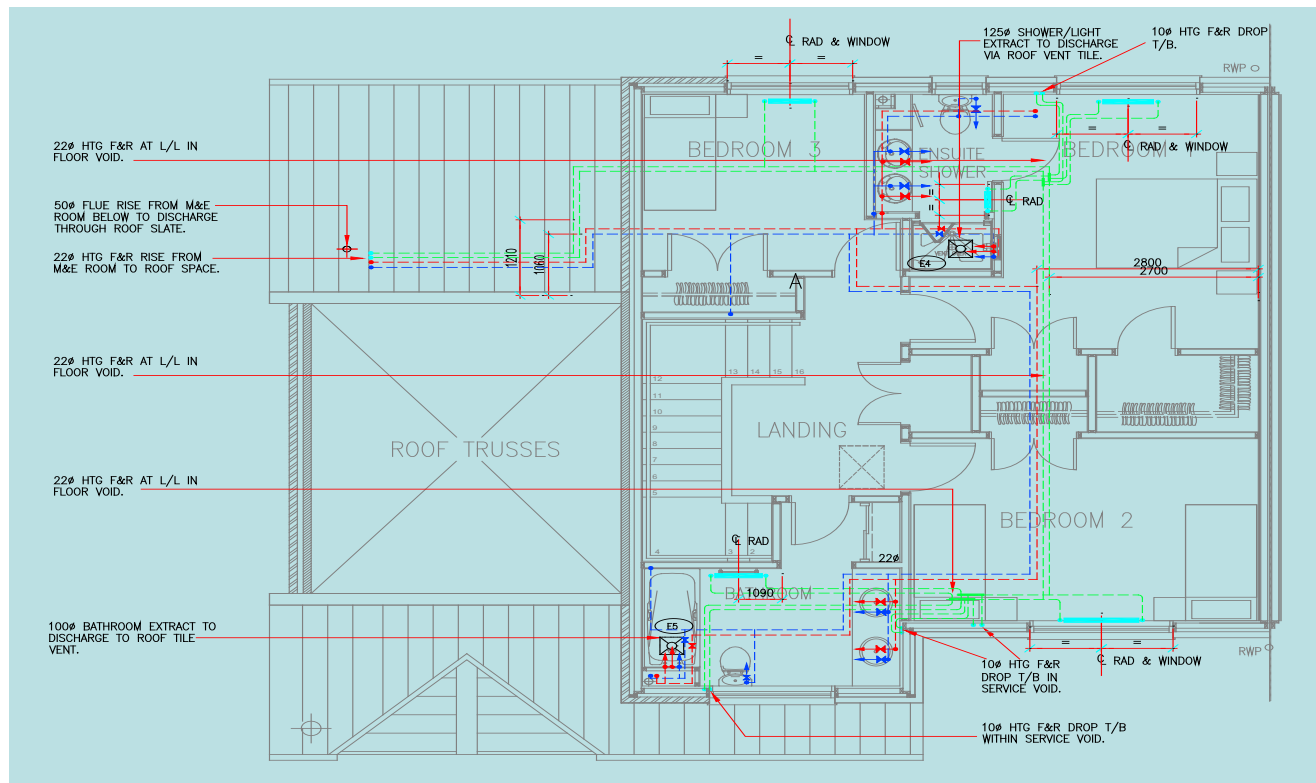
These detail a specific property, showing dimensions of rooms, locations of windows, doors, guttering, soil pipes etc. They show different elevations – front, rear, side.



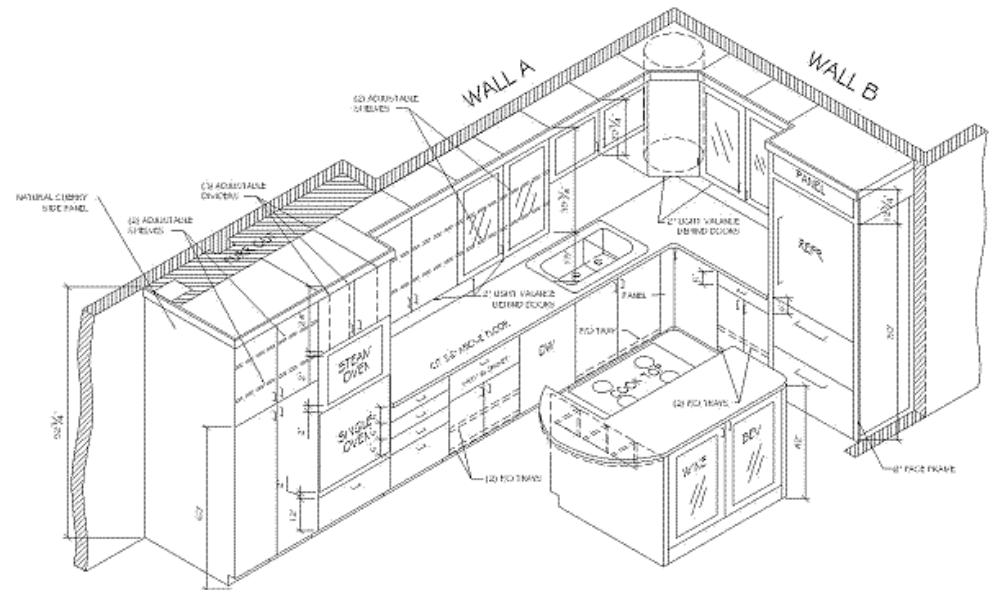
Scale 1:50 – floor plan shows the room layouts.



These are specific to one particular room or area in the property and show pipework layout and positions.



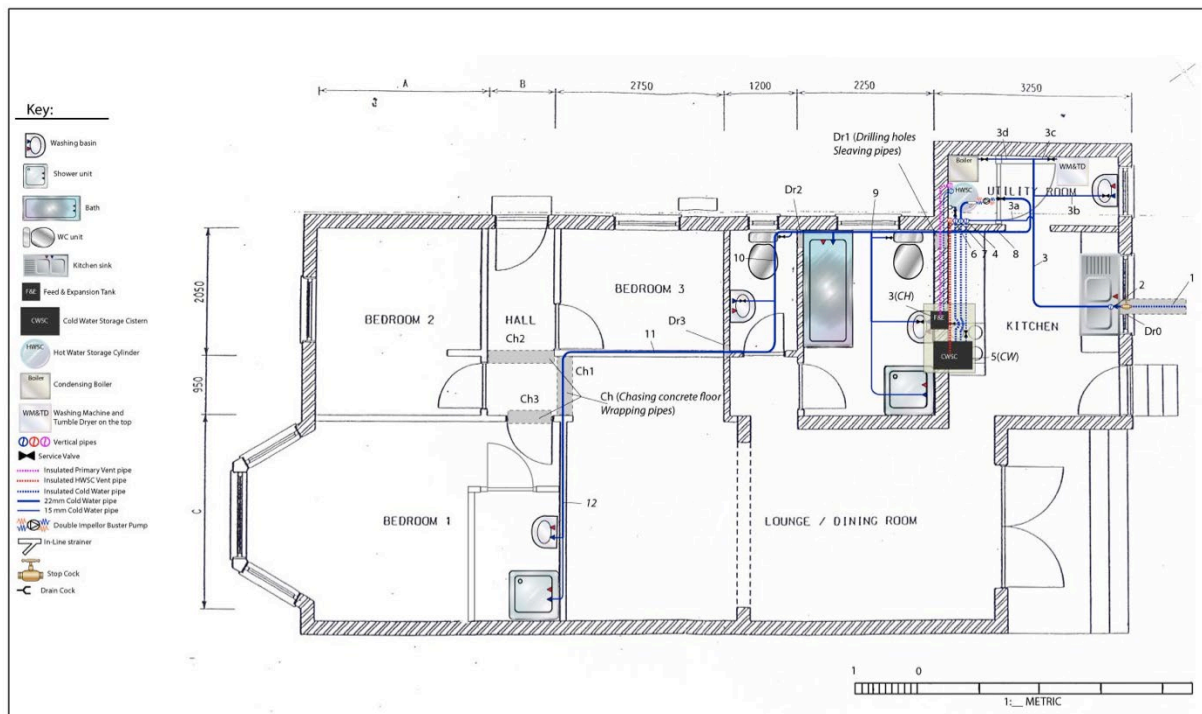
Scale 1:10



Symbols

Plans: Service layout plans

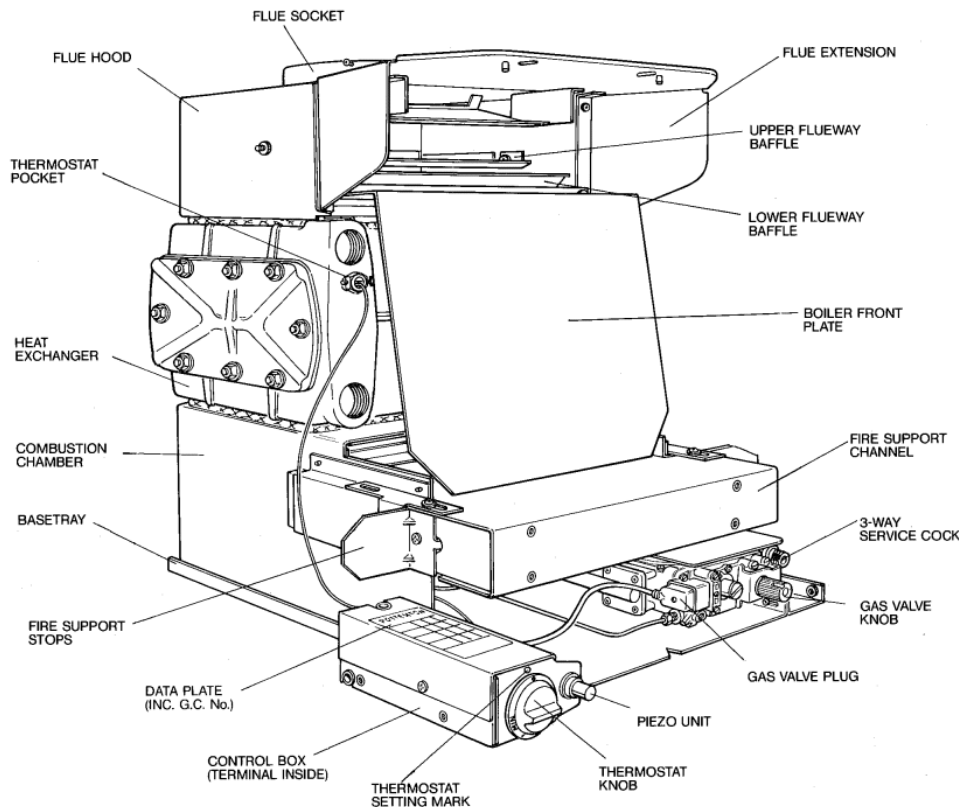
Sometimes produced to allow trades to work together. For example a joiner who needs to notch a joist for a plumber (Building Regs). They show where pipework will run.



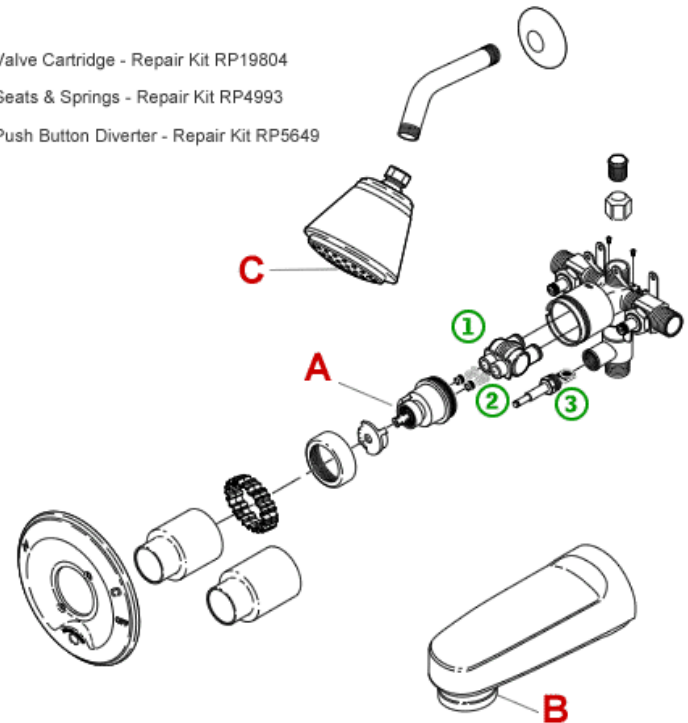
Symbols

Plans: Assembly drawings

These are produced by manufactures and show all the individual parts of an appliance.



- ① Valve Cartridge - Repair Kit RP19804
- ② Seats & Springs - Repair Kit RP4993
- ③ Push Button Diverter - Repair Kit RP5649



Symbols

Pipework colours

The Water Regulations require pipework to be identified:

Blue: wholesome water

Yellow: natural gas



BS1710 Identification Guide			
Pipe Contents	Basic Colour	Colour Code ID	Basic Colour
Water			
	150 mm	150 mm	150 mm
Drinking	Green	Auxiliary Blue	Green
Cooling (primary)	Green	White	Green
Boiler Feed	Green		Green
Condensate	Green		Green
Chilled	Green		Green
Central Heating < 100°C	Green		Green
Central Heating > 100°C	Green		Green
Cold, Down Service	Green		Green
Hot Water Supply	Green		Green
Hydraulic Power	Green	Salmon Pink	Green
Sea, River Untreated	Green		
Fire Extinguishing	Green	Safety Red	Green
Oils			
Diesel Fuel	Brown	White	Brown
Furnace Fuel	Brown		
Lubricating	Brown	Emerald Green	Brown
Hydraulic Power	Brown	Salmon Pink	Brown
Transformer	Brown	Crimson	Brown
Refrigeration Service			
Refrigerant 12	Yellow Ochre	Blue	Yellow Ochre
Refrigerant 22	Yellow Ochre	Green	Yellow Ochre
Refrigerant 502	Yellow Ochre	Brown	Yellow Ochre
Anhydrous Ammonia	Yellow Ochre	Dark Mauve	Yellow Ochre
Other Refrigerants	Yellow Ochre	Emerald Green	Yellow Ochre
Other Applications			
Natural Gas	Yellow Ochre	Yellow	Yellow Ochre
Compressed Air	Light Blue		
Vacuum	Light Blue	White	Light Blue
Steam	Silver Grey		
Drainage	Black		
Electrical Conduits / Ducts	Orange		
Acids and Alkalis	Violet		