City of Glendora BUILDING \& SAFETY DIVISION

## WATER HEATER



## General

California Plumbing Code (CPC)

- Replacement of water heater requires a permit
- Unions required, on water piping, within 12 inches of the appliance/
609.5 or flexible connectors in enclosures or indoors
- Full-open valve required on cold water supply
606.2
- Hot and cold pipe insulated within 5 feet in unconditioned area

Energy, Section 150

- Insulate hot water recirculating pipes entire length
- Outside combustion air openings sized at 1 square inch per 4000 BTU are

Energy, Section 150
507.1 required within upper and lower 12" of enclosures in buildings of unusually tight construction

- Minimum two 100 square inch openings are required
508.14
- Must be installed per manufacturer's listing


## Access \& Working Space

- Working space by firebox must be 30 in. X 30 in. minimum
507.26
- Minimum closet door size is 24 in wide
508.4.2
- Attic: solid passage floor maximum 20 ft ; minimum 24 in wide
508.4
- Attic equipment requires light \& receptacle near WH


## Location

- Fuel-fired WHs in bedroom, bathroom OK if direct-vent type or behind tight-fit self-close door with exterior combustion air
504.1
- In garage: burner/heating element must be 18 in. above floor FIG 41
507.13
- In garage: protected from vehicle damage; 42 " tall, 18 " into ground FIG 41
- WH supported on ground requires 3 inch concrete base
- Strap upper and lower third with minimum 4 in clearance to controls FIG 41
507.4
- Outdoor enclosure required unless WH listed for outdoors
507.2


## Pan

- Water tight pan of corrosion-resistant materials required if leaks would cause damage (located in attic, floor-ceiling assembly or floor-subfloor where damage could occur)
- Drain pipe minimum $3 / 4$ in to indirect waste or on building exterior 6-24 in above grade


## Temperature \& Pressure Relief Valves (TPRV)

- Temperature-pressure relief valve required FIG 42


## TPRV Discharge Pipe

- Size at least same as TPRV outlet 608.5
- End pointing downward and w/no threads FIG $41 \quad 608.5$
- Drain terminates outside 6 in. - 24 in. from ground, floor, or receptor 608.5
- $3 / 4$ in. minimum (galvanized steel or copper), no trap, no reduction, no thread on end 608.5
- Drain line may not run uphill 608.5
- Expansion tank required 608.3


## Vents \& Flues

- Draft hood or barometric damper in same place as WH
509.11.4
- Terminate minimum 5 ft above draft hood
509.6.2.1
- Only 1 draft hood
509.11.1
- Single wall vents prohibited in dwellings
509.7.3
- No single wall in concealed space or attic
509.7.3.2
- Secure vent connector to draft hood \& vent w/screws or other approved means
509.10.5


## Expansion Tank

- A water system provided with a check valve, pressure reducer, backflow preventer, 608.3 or other normally closed device that prevents dissipation of building pressure back into the water main, shall be provided with an approved, listed and adequately sized expansion tank


## Gas Supply

- Approved gas shut off valve 1212.5
- Gas flex connector limited to 6 feet 1212.5
- Pressure test required for new gas lines exceeding 6 feet 609.4

This is a typical installation. Other requirements may apply.

