



**City of Santa Monica
Building and Safety Division**

**Sump, Ejector and Backwater
Valve Guide**

This list is to be used as a general guide.

It is not inclusive of all code requirements and inspection criteria.

Based on the 2016 California Plumbing Code (CPC) 710

California Codes available at www.bsc.ca.gov

Backwater Valves

- Where a fixture is installed on a floor level that is lower than the next upstream manhole cover of the public or private sewer serving such drain piping, (it) shall be protected from backflow of sewage by installing an approved type of backwater valve. 710.1
- Fixtures on floor levels above such elevation shall not discharge through the backwater valve. 710.1
- Located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover. 710.6
- Cleanouts for drains that pass through a backwater valve shall be clearly identified with a permanent label stating "backwater valve downstream". 710.1

Sumps and Ejectors

- Minimum 2" discharge line from ejector, 3" discharge line required for other than single family. 710.3(2)
- The discharge line shall be of approved pressure rated material with an accessible backwater or swing check valve and gate or ball valve on the discharge side of the backwater or swing check valve. 710.4
- Minimum ejector capacity 20 gallon per minute if serving water closets or urinals. 710.3(1)
- Discharge line shall connect to gravity drainage from the top through a wye-branch fitting. 710.4
- Dual pumps or ejectors in 'public use' occupancy with audio and visual alarm to signal pump failure or overload in which the lowest inlet is minimum 2" from the high-water or 'starting' level of the sump. 710.9
- Size vent pipe per table 703.2 for the number and type of fixtures discharging into the sump. The vent shall extend separately through the roof and be large enough to maintain atmospheric pressure within the sump under normal operating conditions (minimum 1 ½"). 710.10