



City of Aliso Viejo

Building Division

12 Journey, Suite 100

Aliso Viejo, CA 92656

(949)425-2540 Fax (949)425-3899

www.cityofaliso viejo.com

MASONRY FENCE

117

Construction of masonry fences lower than 42 inches high and not supporting surcharge does not require a building permit from the City Building Department however, the installation of the wall still needs to meet minimum California Building Code and local city ordinances.

I. Wall Height

Fence height is measured from the top of the footing to the top of the wall

II. Masonry Fence Specifications

Use the following specifications when constructing a masonry fence.

1. Concrete Mix

The concrete mix for footings must meet the strength of F'c = 4500 psi minimum Type V

2. Mortar Mix

Mortar mix must meet the strength of F'c = 1800 psi minimum, or the following:

- 1 part Portland cement
 - 3 1/2 parts sand
 - 1/4 part hydrated lime or lime putty
- Plastic cement may be used with 3 parts sand to 1 part plastic cement.

3. Reinforcing Steel

Reinforcing steel must be deformed and comply with ASTM specifications A615-82, Grade 40. When one continuous bar cannot be used, a lap or splice of 40-bar diameters is required.

4. Grout Mix

Grout must meet the strength of F'c = 2000 psi minimum, or the following:

- 1 part Portland cement
- 3 parts sand
- 2 parts pea gravel (3/8 - inch aggregate)

Water added to pouring consistency without segregation of the grout constituents.

Use of plastic cement is not allowed for grout.

NOTE: Fill cells solid with grout where steel occurs.

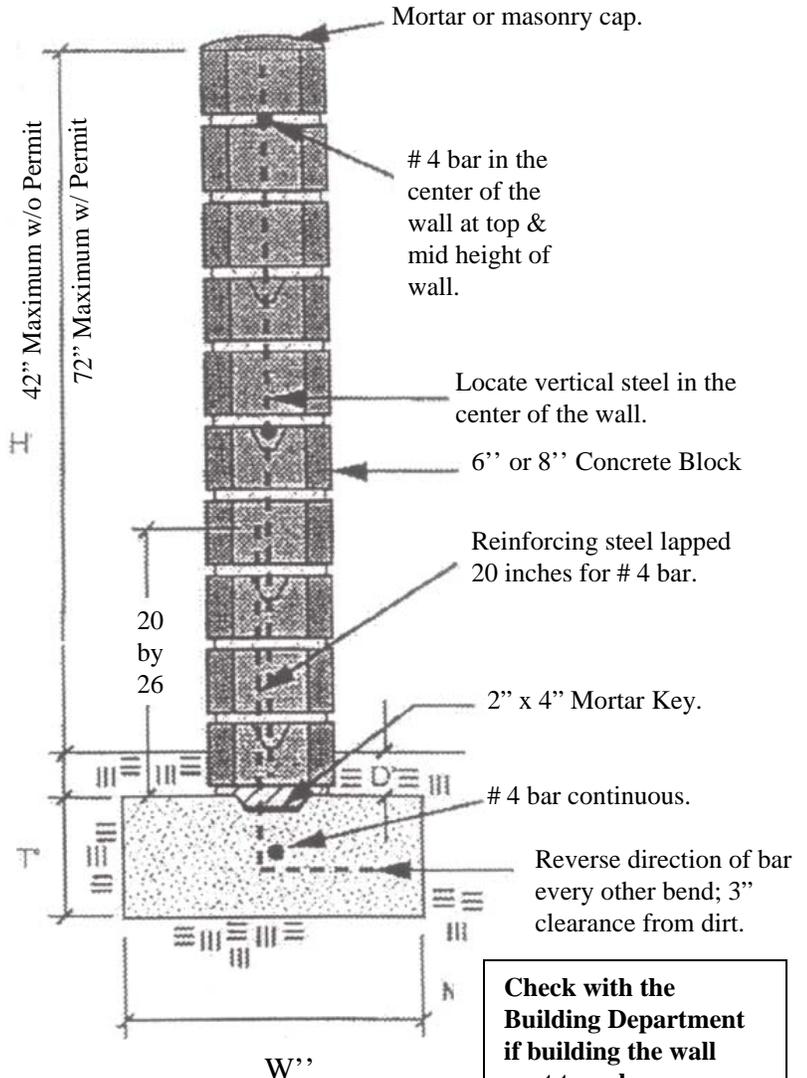
Rod or vibrate immediately. Re-rod or revibrate grout about 10 minutes after pouring to insure solid consolidation. Stop grout 2 inches from top of masonry units when grouting of second lift is to be continued at another time.

5. Mortar Key

To insure proper bonding between the footing and the first course of block, a mortar key must be formed by embedding a flat 2x4 flush with and at the top of the freshly poured footing. It should be removed after the concrete has started to harden (about 1 hour). A mortar key may be omitted if the first course of block is set into the fresh concrete when the footing is poured, and a good bond is obtained.

6. Soil

All footing must extend at least 12 inches into undisturbed natural soil or compacted to at least 90 percent density. Soil should be dampened prior to placing concrete in footings. A soils report, completed by a licensed engineer, may be required.



Check with the Building Department if building the wall next to a slope.

REINFORCING STEEL REQUIREMENTS FOR MASONRY WALLS					
Wall Height	Material	W in Inches	T in Inches	D in Inches	Reinforcing Steel
4'-0"	6" Block	12	12	2	# 4 @ 32" o.c.
	8" Block	12	12	2	# 4 @ 24" o.c.
5'-0"	6" Block	12	18	4	# 4 @ 32" o.c.
	8" Block	18	18	4	# 4 @ 24" o.c.
6'-0"	6" Block	18	24	4	# 4 @ 24" o.c.
	8" Block	18	24	4	# 4 @ 24" o.c.