



Free Standing Wall

Minimum Requirements

This information bulletin outlines the City's requirements for a free standing wall.

No building permits or inspections are required for this wall.

Type of Block

All free standing walls must either be constructed using decorative block or must be finished (e.g., with stucco) to match the main structure.

Block

All block must be type "N" grouted solid with $f'_m=1,500$ psi.

Mix Requirements

Note: The use of plastic cement is not permitted in retaining walls.

1. The concrete mix for footings must meet a compressive strength of $f'_c=2,500$ psi minimum.
2. The mortar mix must have a compressive strength equal to 1,800 psi minimum. One possible mix contains the following proportions by volume:
 - 1 part Portland cement
 - 3½ parts sand
 - ¼ part hydrated lime or lime putty
3. Grout must have a compressive strength equal to 2,000 psi minimum. One possible mix contains the following proportions by volume:
 - 1 part Portland cement
 - 3 parts sand
 - 2 parts pea gravel (3/8-inch aggregate)

Add water until pouring consistency is achieved without segregation of the grout constituents. Rod or vibrate immediately. Re-rod or re-vibrate grout about 10 minutes after pouring to ensure solid consolidation. Stop grout two (2) inches from top of masonry units when grouting of second lift is to be continued at another time.

Mortar Key

To ensure proper bonding between the footing and the first course of block, a mortar key must be formed by embedding a flat 2 x 4 flush with and at the top of the freshly placed footing. It should be removed after the concrete has started to harden (about one (1) hour). A mortar key may be omitted if the first course of block is set into the fresh concrete when the footing is placed and a good bond is obtained.

Reinforcing Steel

Reinforcing steel must be deformed and comply with ASTM specification A615-85, Grade 40 or 60. When one continuous bar cannot be used, a lap or splice of 24" is required.

