NONBEARING MASONRY WALLS

Discipline: Structural

This Interpretation of Regulation (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA, which include State of California public elementary and secondary schools (grades K-12), community colleges, and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Only IRs listed on the DSA publications Webpage www.dgs.ca.gov/dsa/publications at the time of plan submittal to DSA are considered applicable.

Purpose: To clarify the requirements for nonbearing masonry walls designed in accordance with CBC Section 2114A.

Scope: This IR is applicable to short retaining and garden walls not supporting a surcharge and freestanding nonbearing non-shear masonry walls of any height.

Design and Construction Requirements: Retaining walls less than 4 feet above the top of the foundation and not supporting a surcharge, freestanding site walls or fences of any height, and interior nonbearing non-shear walls as defined as nonparticipating masonry elements in TMS 402 Section 1.18.3.1 of any height shall be designed and constructed in accordance with CBC Chapter 21A with the modifications indicated in Section 2114A and the following:

- Minimum horizontal steel shall be 0.001 times the nominal cross sectional area and be spaced up to 4'-0" on center maximum vertically, except as required by TMS 402 Section 1.18.4.5.1.
- Cells containing reinforcement need only be grouted, except as required by TMS 402 Section 1.18.4.5.1.
- Mortar testing per CBC Section 2105A.2.2.1.4 is not required.
- Masonry core testing per CBC Section 2105A.5 is not required.

Masonry retaining wall less than 4 feet above the top of the foundation and not supporting a surcharge and masonry fences less than 6 feet above adjacent grade are not defined as “School Buildings” per CAC Section 4-314 and do not require approval by DSA unless included in the plans for DSA approval, in which case, the walls shall be designed and detailed considering the above requirements.