



**BUILDING CODE MANUAL
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY DIVISION
Based on the 2011 LACBC**

**#19
509.2
Article 1
06-28-11
Page 1 of 2**

HORIZONTAL BUILDING SEPARATION ALLOWANCE (PODIUM BUILDING)

Section 509.2 contains one of the few provisions that are considered exceptions to the principle that a fire wall is strictly a vertical element without any horizontal offsets. The 3-hour horizontal assembly is equivalent in features to the construction of a fire wall. The provisions contained in Section 509.2 allow a parking garage or other occupancies in the basement(s) and/or first story of a building to be considered a separate and distinct building for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction when certain conditions are met.

The concept found in Section 509.2 is similar to provisions found in previous codes that were based on the UBC. The major difference is the current Building Code requires the separation to be a 3-hour horizontal assembly whereas the previous codes (based on the UBC) required the separation to be a 3-hour occupancy separation. For compliance, the previous codes allowed the separation to be horizontal, sloped or vertical. The current requirement for a 3-hour horizontal assembly is creating compatibility issues for existing structures.

There are situations where the horizontal assembly is not fully horizontal due to the need of vertical clearance requirements, an example of this usually occurs at the entry of the parking garage where the horizontal assembly is sloped. As such, in Section 509.2, where the code requires a 3-hour horizontal assembly, the use of a sloped to vertical assembly may be used as long as continuity, and all other construction features are maintained. Since the horizontal assembly is an exception to the principle that a fire wall is strictly vertical, allowing sloped or vertical elements in the horizontal assembly is permissible.

A separation is considered horizontal where the rise is less than 1 vertical for every 10 horizontal. Openings/penetrations in horizontal assemblies shall be rated per the requirements in Section 713. Where the separation is not horizontal, openings/penetrations are to be rated per the requirements of openings for a 3-hour fire wall per Section 715.4.

New BCM

WRITTEN BY: FADY KHALIL
Civil Engineer

REVIEWED BY JUAN MADRIGAL
Senior Civil Engineer

RECOMMENDED BY

APPROVED BY


HASSAN ALAMEDDINE
Chief Engineer


RAJ PATEL
Superintendent of Building