



Date: December 1, 2023
To: City of Houston HPW-HPC
Attention: CCM
From: Jensen Hughes
Subject: Horizontal Building Separation (Podium Construction)

This technical memo is provided to describe the significant changes to the Houston Construction Codes with regards to the new requirements of a horizontal building separation (podium construction).

The provisions set forth in **Section 510** allow for modifications or exceptions to the general provisions of Chapter 5 for allowable building heights and areas. These special provisions are viewed as specific in nature and take precedence over any general provisions that may apply. This methodology is often referred to as a “podium” or “pedestal” building. Limited in application, the provisions create, in effect, an exception that allows those stories below a 3-hour horizontal fire separation to be considered portions of a separate building from the “building” above the horizontal fire separation. In addition, if a fire wall is needed to address building area issues in the upper building or buildings, the fire wall construction can stop at the 3-hour fire-resistance-rated horizontal assembly and does not need to extend to the foundation. Multiple conditions must be met in order to take advantage of these provisions.

A new allowance addresses the permissible materials of stairway construction where a combustible building (Type III, IV or V) is located above the lower noncombustible (Type IA) building. Where new Condition 4 is applied, the minimum 3-hour fire-resistance-rated horizontal separation is extended vertically downward from the upper building. As a result, the interior exit stairways can be considered as located only in the upper building where combustible stairway construction is permitted.

memo.

2021 Houston Building Code Changes –**SECTION 510
SPECIAL PROVISIONS.**

510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction where the following conditions are met:

1. The buildings are separated with a horizontal assembly having a fire-resistance rating of not less than 3 hours. **Where vertical offsets are provided as part of a horizontal assembly, the vertical offset and the structure supporting the vertical offset shall have a fire-resistance rating of not less than 3 hours.**
2. The building below, **including** the horizontal assembly, is of Type IA construction.
3. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 716-~~5~~.

Exception: Where the enclosure walls below the horizontal assembly have not less than a 3-hour fire-resistance rating with opening protectives in accordance with Section 716-~~5~~, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided **that the following conditions are met:**

1. The building above the horizontal assembly is not required to be of Type I construction.
 2. The enclosure connects fewer than four stories.
 3. The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.
- 4. Interior exit stairways located within the Type IA building are permitted to be of combustible materials where the following requirements are met:**
- 4.1. **The building above the Type IA building is of Type III, IV, or V construction.**
 - 4.2. **The stairway located in the Type IA building is enclosed by 3-hour fire-resistance-rated construction with opening protectives in accordance with Section 716.**
- ~~4.5.~~ The building or buildings above the horizontal assembly shall be permitted to have multiple Group A occupancy uses, each with an occupant load of less than 300, or Group B, M, R or S occupancies.
- ~~5.6.~~ The building below the horizontal assembly shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
- ~~6.7.~~ The maximum building height in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the grade plane.