

FIRE RISK MANAGEMENT, INC

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Date: 23 May, 2013

Memo Report

From: W. Mark Cummings, P.E.
To: Mr. Skip Reske; IDC Construction
Subject: Review of the Passive Fire and Smoke Barrier Issues

In response to a couple of recent questions regarding the need for fire and/or smoke barriers within two specific areas of the proposed design for the new Westin Hotel, I have reviewed the details of the areas in question. This review addresses two specific questions;

1. the need for a fire barrier, on all applicable floors, at the interface between the area that provides access to both the Service Elevator and Laundry Chute and the Elevator Lobby in the northeast corner of the hotel's tower; and
2. the need for any fire barriers within the office areas located on the Mezzanine level.

The Service Elevator and Laundry Chute are located in the northeast corner of the "tower" portion of the hotel. Access to both the elevator and laundry chute is provided via a common space. The elevator is required to be enclosed in a 2-hour fire rated shaft. Although the elevator doors are not considered to have a specific fire resistance rating, the associated elevator lobby that provides access to the elevator is not required to be separated from the remainder of the building by any fire rated barriers when the building is fully protected by an automatic sprinkler system(s). The elevator "lobby" is protected by a smoke barrier; albeit there are a number of options to meet this requirement. The laundry chute itself must be enclosed by 2-hour fire rated shaft. The doors that provide access into the laundry chute are not required to have a fire resistance rating, but the rooms into which the laundry chute opens must be separated from the rest of the building by a 1-hour fire rated barrier. As such, it is the laundry chute and not the elevator that is source for the 1-hour fire rated barrier requirement, including having a properly rated fire door assembly, to separate this area from the rest of the building.

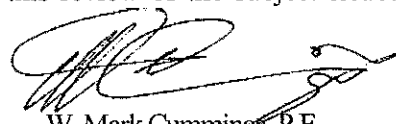
It is understood that the architectural floor plans for the Hotel's office area located at the west end of the Mezzanine level may include numerous walls that have been identified as having a fire resistance rating. Due to the fact that this building is fully protected with an automatic sprinkler system(s), none of the walls throughout all portions of the Mezzanine level are required to have any fire resistance rating. The only barriers (walls and ceilings) that must provide some measure of protection are those of the corridor(s). Any exit access corridor must be separated from the remainder of the building by barriers that are smoke resistant. This simply means that all openings in the corridor walls or ceilings must be sealed to restrict the passage of smoke. Doors leading into the corridor should be provided with automatic closing devices. The walls and ceilings, including any doors, can be constructed of any material as long as they continue to meet the "finish" requirements for this occupancy type. All other walls and ceilings separating the offices and associated spaces have no fire resistance requirements.

I have tried to keep this explanation brief and succinct, but should you or anyone within the State or City Governments have any questions regarding this review of the subject issues, please do not hesitate to contact me.

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MAY 28 2013

Dept. of Building Inspections
City of Portland Maine


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