

- The sources of the primary and backup water supplies to the high zone (40th floor through the 47th floor) were the same as for the mid-level zone.

The NYCBC requirement was for a 30 min water delivery duration at a delivered density of 0.04 L/min-m² (0.10 gal/min-ft²), and Investigation calculations determined that the installed system met these requirements. This would have been sufficient to control fires of four clusters of six workstations each, either all on one floor or single clusters on four floors.

These fire protection measures addressed the conventional approaches to preserving life safety. However, in the U.S., neither architectural nor structural engineering practice explicitly required (then or currently) an evaluation of the structural system response to heating (fires) as part of the building design.

1.2.5 The Workplace

Many of the roughly 8,000 people who worked in or visited WTC 7 on a given day would have arrived via trains that stopped in the large station under the main WTC complex. They could enter the first floor of the building through street-level doors along Vesey Street, Washington Street, and West Broadway. Alternatively, from the main WTC complex, they could cross Vesey Street via the Promenade or the covered pedestrian bridge and enter the 3rd floor lobby of the building.

Within the building core were 32 elevators, 28 of which would have taken them to their various offices. The floors that the elevators served are indicated in Figure 1–7.

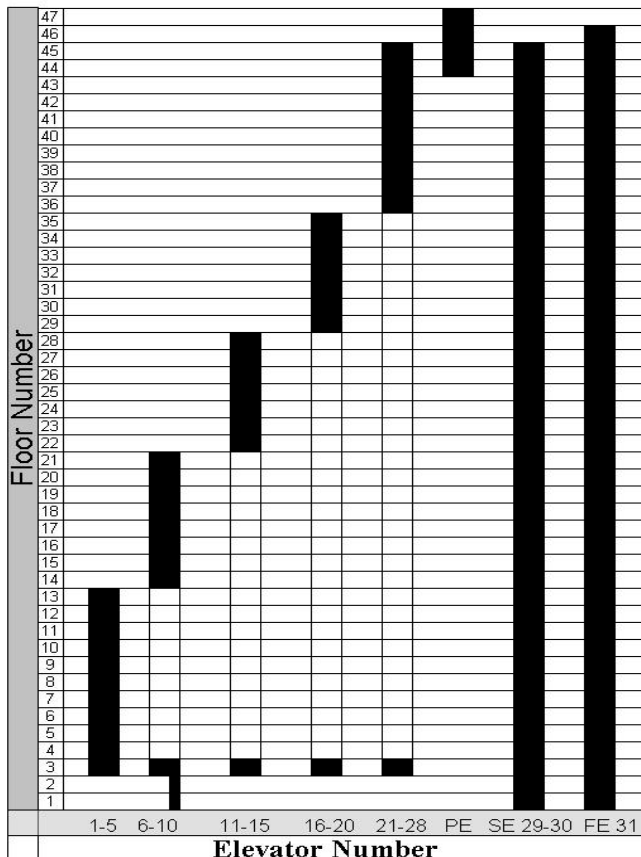


Figure 1–7. Schematic drawing of the elevators in WTC 7.