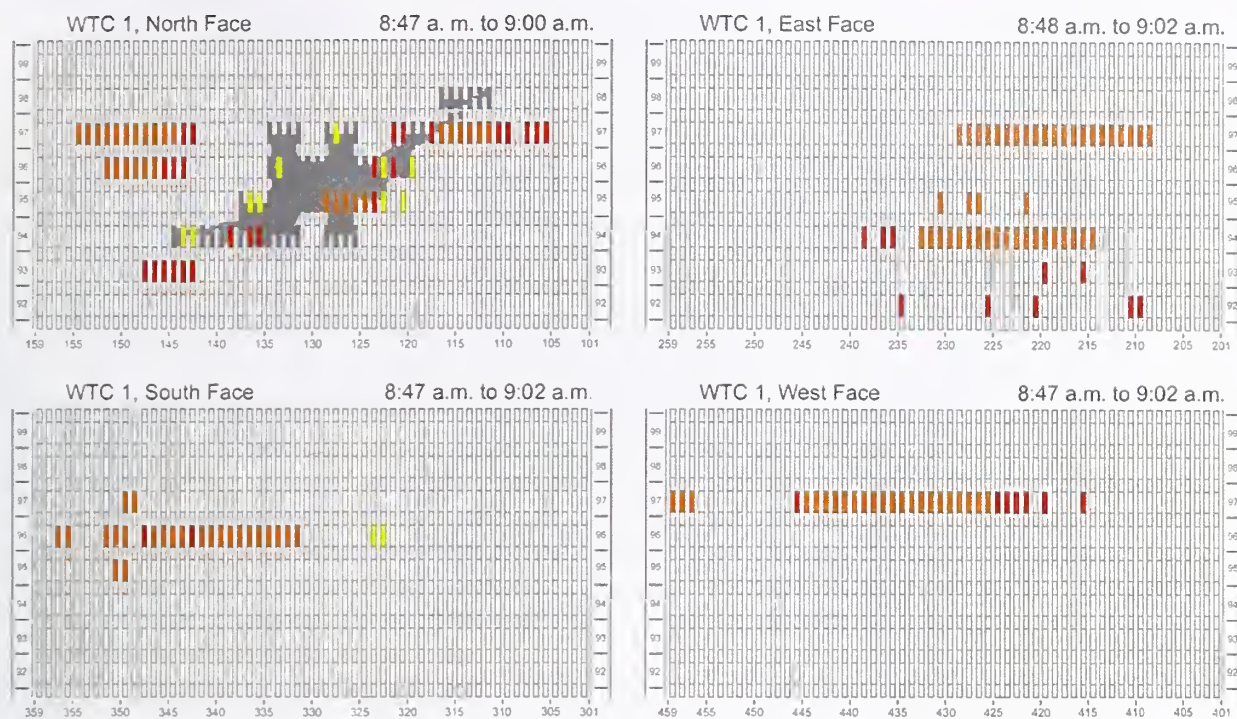




Note: Color coding—white, no fire; yellow, spot fire; red, fire visible inside; orange, external flaming.

Figure 2-5. Representation of exterior views of the fires on the four faces of WTC 1 from 8:47 a.m. to about 9:02 a.m.

There was also no way to abate the opaque, hot, and toxic smoke that quickly began accumulating. The manually activated smoke purging system was intended for smoke removal during fire department operations following a fire. Thus, it was not turned on during the 102 min that the tower would remain standing. It would not likely have helped anyway. Neither the World Trade Center Safety Director nor the arriving firefighters knew where the fires were located, so they could not have known how to direct the intake and exhaust flows. Furthermore, the integrity of the vent shafts on the upper floors had been compromised by the aircraft impact, making it unlikely that the system could have functioned as intended.

Most of the people in WTC 1 were aware of the possibility of an emergency. A quarter of them had been working in the building since before the 1993 bombing, and most of those had been in the building on that day. Half the people had been working in the building for at least two years; many had heard the stories and had participated in the emergency drills.

The building occupants knew that something serious had happened. A third of the survivors had heard the roar of the plane. Nearly two thirds reported feeling the violent movement of the building. Half sensed that they were in a life-threatening situation. At the Concourse Level, a fatal fireball filled the space from the elevators to the exit toward WTC 3. Almost immediately, people began calling 9-1-1, both for help and to find out more about what was going on.

Within 5 min to 8 min of the strike, most of the 7,545 people below the floors of impact began to evacuate. Their progress is tracked in Table 2-1. Water and debris were in the three stairwells. The air smelled of jet fuel and was becoming gray with smoke and pulverized gypsum, thermal insulation, and