

Between roughly 2:00 p.m. and the collapse of WTC 7 at 5:20:52 p.m., fires were observed spreading on the 7th floor through the 13th floor, with the exception of the 10th floor. One short video clip indicated that a small fire was present on the north side of the 14th floor shortly prior to the collapse. In the following descriptions of these fires, approximate times are used. Details concerning actual times and uncertainties are included in the previous subsection.

7th Floor

Early indications of a developing fire were observed on the west side of the 7th floor shortly after 2:00 p.m. This fire spread north along the west face. Initially, very little smoke was released from nearby windows. Heavy smoke eventually appeared from the windows on the west side nearest the north face. The evidence suggests that the fire spreading along the west side turned the northwest corner and began to spread east across the north side sometime prior to 3:00 p.m.

The fire on the north side spread eastward relatively quickly, reaching Column 47 by 3:12 p.m. The fire appeared to stop spreading after reaching this point, and the flames died away. Only indications of small localized spot fires to the west of Column 47 were then observed until around 4:15 p.m. Roughly 10 min after this time, a large fire had developed to the east of Column 47. By 4:38:11 p.m., the last image available, windows were open at least as far east as 7-44D, and the new flames had already died down. No additional images are available to indicate the fire behavior further to the east on this floor. It is likely that the fire continued spreading toward the east face.

In general, with the exception of the north side of the west face, little smoke was released from the west and north face windows by the fires on the 7th floor. It is likely that the fires on these sides of the floor vented through the south face during the period that burning was observed.

8th Floor

The earliest fires observed on the 8th floor were on the north face in windows near the center of the face. As late as 3:22 p.m., there was no indication of fire in this area, but about 17 min later a substantial fire spreading to the east was visible between windows 8-47C and 8-53C. The extent of the fire further west at this time is not clear. NIST found no evidence showing where this fast developing fire first appeared on the north face. Later observations, around 3:42 p.m., of intense burning on the north side of the west face at the same time that fires were dying at nearby locations on the north face suggest that the fire initially bypassed the northwest corner, only burning out this area after the fire became established on the north face.

The rapid development and flame spread on the north side of the floor continued after the fires were first observed, and flames reached the east face around 3:55 p.m. Even though little smoke and flame were visible coming from north face windows located close to the flames, extremely intense external flaming developed on the east face when the fire reached that location. This is strong evidence that the ambient wind and associated external pressure variations around WTC 7 had a large effect on the appearance of flames in windows on the different faces.

By shortly after 4:00 p.m., much of the burning near the center of the north face had died down. The small fires that were observed appeared to be located well away from the exterior wall.