

Kansas City Hyatt Regency Walkway Disaster (wikipedia)

http://en.wikipedia.org/wiki/Hyatt_Regency_walkway_collapse

Construction on the 40-story [Hyatt](#) Regency Hotel began in 1978, and the hotel opened in July 1980 after some construction delays. One of the defining features of the hotel was its lobby, which featured a multistory [atrium](#) crossed by suspended concrete walkways on the second, third, and fourth levels, with the fourth level walkway directly above the second level walkway.

The disaster

On [July 17, 1981](#), approximately 2,000 people had gathered in the atrium to participate in and watch a [dance contest](#). Dozens stood on the walkways. At 7:05 PM, the walkways on the second, third, and fourth floor were packed with visitors as they watched over the active lobby, which was also full of people. The fourth floor bridge was suspended directly over the second floor bridge, with the third floor walkway set off to the side several meters away from the other two. Construction issues led to a subtle but flawed design change that doubled the load on the connection between the fourth floor walkway support [beams](#) and the [tie rods](#) carrying the weight of the second floor walkway. This new design could barely handle the [dead load](#) weight of the structure itself, much less the weight of the spectators standing on it. The connection failed and both walkways crashed onto the lobby, killing 114 people and injuring more than 200 others.

There are lots of pages on the web about this disaster. Review the material available.