

- In 1993, The Port Authority adopted a policy providing for implementation of fire safety recommendations made by local government fire departments after a fire safety inspection of a Port Authority facility and for the prior review by local fire safety agencies of fire safety systems to be introduced or added to a facility. Later that year, The Port Authority entered into an agreement with FDNY that reiterated the policy adopted by The Port Authority, recognized the right of FDNY to conduct fire safety inspections of Port Authority properties in the City of New York, provided guidelines for FDNY to communicate needed corrective actions to The Port Authority, ensured that new or modified fire safety systems are in compliance with local codes and regulations, and required third-party review of such systems by a New York State licensed architect or engineer.
- Compartmentation of spaces is a key building fire safety requirement to limit fire spread. The WTC towers initially had 1 hour fire-rated partitions separating tenants (demising walls) that extended from the floor to the suspended ceiling, not the floor above (the ceiling tiles were not fire rated). Over the years, these partitions were replaced with partitions that were continuous from floor to floor (separation wall), consistent with the 1968 NYC Building Code. Some partitions had not been upgraded by 1997, and a consultant recommended to The Port Authority that it develop and implement a survey program to ensure that the remediation process occurred as quickly as possible. It appears that with few exceptions, nearly all of the floors not upgraded were occupied by a single tenant. The Port Authority adopted guidelines in 1998 that required such partitions to provide a continuous fire barrier from top of floor to underside of slab.
- No technical basis was found for selecting the sprayed fire-resistive material (SFRM) used or its thickness for the large-span open-web floor trusses of the WTC towers. The assessment of the insulation thickness needed to meet the 2 hour fire rating requirement for the untested WTC floor system evolved over time:
 - In October 1969, The Port Authority directed the insulation contractor to apply 1/2 in. of insulation to the floor trusses.
 - In 1999, The Port Authority issued guidelines requiring that insulation be upgraded to 1 1/2 in. for full floors undergoing alterations.
 - Unrelated to the WTC buildings, an International Conference of Building Officials (ICBO) Evaluation Service report (ER-1244), re-issued June 1, 2001, using the same SFRM recommends a minimum thickness of 2 in. for “unrestrained steel joists” with “lightweight concrete” slab.
- There was no code provision that specifically required the conduct of a fire resistance test if adequate data did not exist from other building components and assemblies to qualify an untested building element. Instead, several alternate methods were permitted, with limited guidance on detailed procedures to be followed. Both the Architect of Record (in 1966) and the Structural Engineer of Record (in 1975) stated that the fire rating of the floor system of the WTC towers could not be determined without testing. NIST did not find evidence indicating that such a test was conducted to determine the fire rating of the WTC floor system. The Port Authority informed NIST that there are no such test records in its files.