

SCHULTE & ASSOCIATES

Building Code Consultants
880D Forest Avenue
Evanston, IL 60202
fpeschulte@aol.com
504/220-7475

CHRONOLOGY SMOKE AND HEAT VENTS IN SPRINKLERED BUILDINGS

- **1979.** The 1979 edition of the Uniform Fire Code (UFC) prohibited the installation of automatic smoke and heat (roof) vents in sprinklered buildings containing high-piled storage. This provision was based upon the concern that roof vents which automatically open will have an adverse effect on the operation of the sprinkler system.
- **Early 1980's.** The UFC ad hoc committee on Article 81 (high-piled storage) recommends that automatic smoke and heat vents and draft curtains be required in sprinklered buildings containing high-piled storage. No research, fire testing or other technical information which demonstrated that automatic smoke and heat vents or draft curtains would not adversely interfere with the operation of the sprinkler system was reviewed by the ad hoc committee. Further, no research, fire testing or other technical information which demonstrated that automatic smoke and heat vents would perform as intended in buildings protected by a sprinkler system was reviewed by the ad hoc committee.
- **1994.** Factory Mutual Research Corporation (FMRC) determines that the installation of draft curtains in buildings protected by a sprinkler system will have an adverse effect on the operation of sprinklers.
- **1997/1998.** A research study of the interaction between sprinklers and smoke and heat vents funded by the National Fire Protection Research Foundation confirms the FMRC research that draft curtains in buildings protected by a sprinkler system will have an adverse effect on the operation of sprinklers. This study also determines that smoke and heat vents are unlikely to operate automatically in storage buildings protected by a sprinkler system which is adequate or slightly inadequate for the hazard protected.
- **1999.** Factory Mutual proposes a code change to delete the requirement for smoke and heat vents in buildings protected by a sprinkler system. This code change is not approved and the first edition of the International Building Code (IBC)/International Fire Code includes requirements for smoke and heat vents in buildings protected by a sprinkler system.

- **2000.** Schirmer Engineering Corporation proposes a code change to include an exception to the requirement for smoke and heat vents in buildings protected by ESFR sprinklers. Schulte & Associates proposes a code change to delete the requirement for smoke and heat vents in buildings. The code change proposed by Schirmer Engineering Corporation is approved. The code change proposed by Schulte & Associates is not approved.
- **2005.** Schulte & Associates proposes a code change to delete the requirement for smoke and heat vents in buildings. The code change proposed by Schulte & Associates is not approved.
- **September 2005.** Schulte & Associates proposes that the issue of use of smoke and heat vents in buildings protected by a sprinkler system be the subject of a ICC Code Technology Committee study group.
- **September 2006.** The ICC Code Technology Committee (CTC) votes to hold a public hearing on the issue of whether or not a study group should be formed to address the subject of the use of smoke and heat vents in building protected by a sprinkler system.
- **September 2006.** Schulte & Associates proposes a code change to delete the requirement for smoke and heat vents in buildings. The code change proposal is not approved.
- **October 2006.** The ICC Code Technology Committee (CTC) holds a public hearing on the issue of whether or not a study group on the subject of the use of smoke and heat vents in sprinklered buildings should be formed. The CTC votes to form a study group.
- **January 2007.** The CTC study group begins its study of the use of smoke and heat vents in buildings protected by a sprinkler system.
- **March 2007.** The study group reaches an impasse and the CTC votes to hold on a debate between members of the study group in June 2007.
- **June 2007.** The debate on issue of the use of automatic smoke and heat vents in sprinklered buildings is postponed to allow a fire test program on automatic smoke and heat vents in sprinklered buildings to be conducted in Orange County, California to be completed. The debate is rescheduled for the CTC meeting in Chicago in early December 2007.

- **August 2007.** Schulte & Associates submits a code change proposal which will allow five alternatives for providing smoke venting in sprinkered buildings. The five alternatives are intended to provide ventilation after the fire is extinguished.
- **October 2007.** The CTC is informed that the smoke and heat vent/sprinkler test program in Orange County, California has been cancelled.
- **December 2007.** The debate on the issue of the use of automatic smoke and heat vents in sprinklered buildings will take place at the CTC meeting in Chicago.
- **February 2008.** The ICC public hearing on code change proposals will be held in Palm Springs, California. The IFC code change committee will hear Schulte & Associates' code change proposal.

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