

Center for Medicaid and State Operations/Survey and Certification Group

Ref: S&C-07-18

DATE: April 20, 2007

TO: State Survey Agency Directors
State Fire Authorities

FROM: Director
Survey and Certification Group

SUBJECT: **Multiple Providers** - Hospitals, Ambulatory Surgical Centers, Nursing Homes, Religious Non-Medical Health Care Institutions, Programs of All-Inclusive Care for the Elderly (PACE) Facilities, Critical Access Hospitals, Intermediate Care Facilities for the Mentally Retarded – Permitted Gaps in Corridor Doors and Doors in Smoke Barriers

Memorandum Summary

- In a smoke compartment that is **not fully sprinklered**, a gap between the face of a corridor door and the door stop should not exceed **¼-inch**, provided that the door latch mechanism is functioning.
- In a smoke compartment that is **fully sprinklered**, a gap between the face of a corridor door and the door stop should not exceed **½-inch**, provided that the door latch mechanism is functioning.

The purpose of this memorandum is to clarify requirements for door gaps in the 2000 edition of the Life Safety Code (LSC), National Fire Protection Association (NFPA) 101. This information applies to corridor doors other than those in required enclosures of vertical openings, exits, and hazardous areas. This information does not apply to doors in smoke barriers, which have other requirements.

The majority of existing health care facilities have solid core wood doors in the corridors, particularly doors to resident or patient sleeping rooms. These doors are usually 36” to 44” wide. Wide wood doors such as those used in health care facilities will expand and contract due to changes in temperature and humidity, and over time warp to some degree. It is not practical, particularly on the latch side of the door, to maintain a minimum of a 1/8 inch gap. For example, a 36” to 44” wood door installed during a dry period with a 1/8 inch gap may not close and latch when the humidity is high. A 1/8-inch gap is not sufficient clearance for proper operation of these doors.

The LSC does not specify a minimum gap for corridor doors [of 1/8-inch] and, in addition, the LSC specifically states that compliance with NFPA 80, Standard for Fire Doors and Fire Windows, is not required (18/19.3.6.3.1). Therefore, it is incorrect to apply the 1/8 inch gap restriction (for doors in smoke barriers) to corridor doors that are not part of a smoke barrier. (18/19.3.7.3 and 8.3.4.1/A8.3.4.1)

It has come to our attention that in limited instances a “light test” has been used to determine if the door gap is adequate or too large. (If the surveyor sees light through the door gap, he/she determines that the gap is too large and the provider is cited for a deficiency.) There is no criterion for a light test anywhere in the LSC or in other NFPA Codes and Standards.

The following Questions and Answers reflect the recommendations of the NFPA Health Interpretations Task Force Door Gap Task Group. The following plan view drawing of a door and frame may help clarify this information.

Question 1: Does the Life Safety Code limit the gap between the edge of a corridor door and the door frame to 1/8-inch?

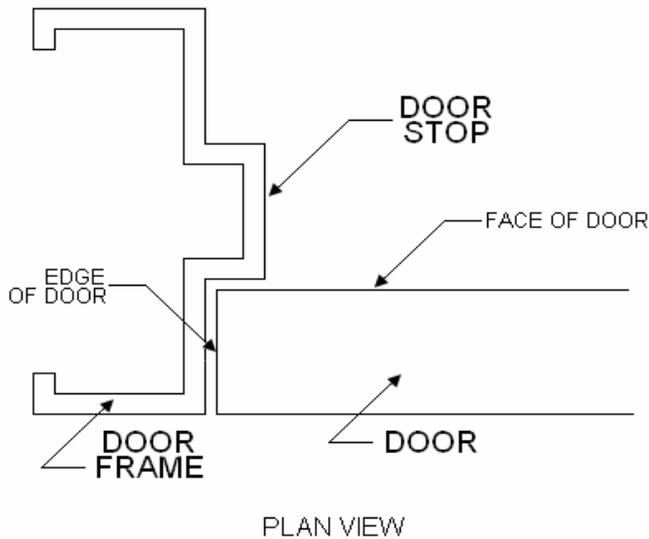
Answer: No. However, because the door stop functions as an astragal, the gap between the edge of a door and the door frame shall not be greater than the depth of the door stop.

Question 2: Does the Life Safety Code limit the gap between the face of the corridor door and the door stop to 1/8-inch?

Answer: No. The LSC does not specify a maximum gap dimension and specifically states that corridor doors are not required to comply with NFPA 80, Standard for Fire Doors and Fire Windows. The Code goes on to state that corridor doors should be relatively smoke tight. Due to the lack of specific dimensions for door gaps and the subjective language in the Code, the following guidance is deemed appropriate. In a smoke compartment that is **not fully sprinklered**, a gap not exceeding **1/4-inch** between the face of a corridor door and the door stop should be permitted, provided that the door latch mechanism is functioning. In a smoke compartment that is **fully sprinklered**, a gap not exceeding **1/2-inch** between the face of a corridor door and the door stop should be permitted, provided that the door latch mechanism is functioning. In a smoke compartment that is not fully sprinklered, to achieve a better fit, the thickness of a 1³/₄-inch thick corridor door should be permitted to be reduced by removing not more than 1/4-inch from the face of the door. In a smoke compartment that is fully sprinklered, the LSC does not impose construction requirements on a corridor door, provided that it resists the passage of smoke. Surveyors determining whether a door is in compliance and fits sufficiently tight in the door frame should refer to the above dimensions.

Question 3: Does the Life Safety Code limit the gap between the meeting edges of the leaves of a two-leaf corridor door to 1/8-inch?

Answer: No. The gap is permitted to exceed 1/8-inch provided that the meeting edges of the leaves are equipped with an astragal, a rabbet, or a bevel.



If you have any questions concerning this memorandum, please contact James Merrill at James.Merrill@cms.hhs.gov

Effective Date: The information contained in this memorandum is current policy and is in effect for all healthcare facilities. The State Agency should disseminate this information within 30 days of the date of this memorandum.

Training: This information should be shared with all appropriate survey and certification staff, surveyors, their managers and state fire authorities and their staff.

/s/
Thomas E. Hamilton

cc: Survey and Certification Regional Office Management (G-5)