U.S. COAST GUARD MARINE SAFETY CENTER PLAN REVIEW GUIDELINE



REVIEW OF DECORATIVE DOORS IN ESCAPE PATHS

Procedure Number: SOLAS-54 Revision Date: October 02, 2023

Z. B. ROBERTSON, LCDR, Chief, Hull Division

Purpose

The purpose of this Plan Review Guideline (PRG) is to provide clear guidance on the review of decorative doors fitted in passenger escape paths.

Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center (MSC) by e-mail or phone. Please refer to Procedure Number SOLAS-54.

E-mail: <u>msc@uscg.mil</u> Phone: 202-795-6729 Website: <u>www.dco.uscg.mil/msc</u>

1. Applicability

This PRG is applicable to SOLAS passenger ships carrying more than 36 passengers. This PRG applies to decorative doors fitted in a designated escape path per the approved Emergency Escape/Egress Plan (EEP). This PRG does not apply to fire doors which must meet "A" or "B" class integrity.

2. Reference

SOLAS II-2/13.3.2 Means of escape in passenger ships (inclusive)

SOLAS II-2/9.4.1.1.7

"The requirements for "A" class integrity of the outer boundaries of the ship shall not apply to exterior doors, except for those in superstructures and deckhouses facing life-saving appliances, embarkation and external assembly station areas, external stairs and open decks used for escape routes. Stairway enclosure doors need not meet this requirement."

SOLAS II-2/9.4.1.2.3

"The requirements for "B" class integrity shall not apply to exterior doors in superstructures and deckhouses."

3. Background

This PRG addresses doors fitted in designated passenger escape paths that are decorative in nature or serve a purpose separate from a required fire door.

For visual appeal or to maintain climate control/HVAC boundaries, decorative doors are being installed in the vicinity of the required fire doors. Additionally, SOLAS II-2/9.4.1.1.7 and 9.4.1.2.3 permit the reduction in "A" and "B" class integrity of exterior doors, respectively. These provisions exclude doors facing life-saving appliances, embarkation areas, and escape routes.

During all conditions of operation, decorative doors fitted in an escape path must allow for means of escape in accordance with SOLAS II-2/13.3.2. Additionally, all decorative doors must be installed in a manner such that they have no effect on the function or use of an adjacent fire door. The concern is that decorative doors could result in loss of egress capability or interfere with the proper function of an adjacent fire door.

A subcategory of decorative doors is the **"automated" decorative door**. These are electronically powered and controlled, with normal door movement actuated by proximity sensors and/or push-to-open buttons. The additional concern for automated decorative doors is that during loss of power, the automated doors may temporarily or permanently lose functionality resulting in the loss of egress capability. Furthermore, without proper safeguards on the local door control modules, the mode for the automated doors can inadvertently be switched into a "locked" position by passengers or crew resulting in a loss of egress capability in one or both directions.

4. Content

Relative to the background section above, decorative doors fitted in an escape path should meet the following functional requirements:

- (1) An available means to open the door in the direction of escape during all conditions. (Note: sliding doors will meet this requirement if they can open in all conditions.)
 - a. This means shall not require any special tools or knowledge to operate.
 - b. For automated decorative doors, means (power driven and/or manual) shall be provided during a loss of power condition.
 - c. For automated decorative doors, safeguards to prevent the inadvertent "locking" of the doors in the direction of escape (SOLAS II-2/13.3.2.6).
 - d. These doors should be capable of being opened by the crew from each side for the purposes of fighting fires.
- (2) The decorative doors shall be arranged such that the decorative doors do not affect the function or use of a required fire door.
 - a. Accessibility of the fire door handle must be unaffected.
 - b. Where required, the ability to pass a fire hose through the fire door must be unaffected.
 - c. The movement of the fire door must be unaffected by any positioning of the decorative door.

Additional considerations for specific arrangements:

Vestibules: When a pair of decorative doors is used to create a vestibule in an egress path, both pairs of doors should be fitted with means to open the doors from inside the vestibule to prevent passengers from being trapped inside.

Available means for automated decorative doors: If a powered push-button or switch is fitted to override the control module of an automated decorative door, allowing for the door to be opened in the direction of egress, it should be conspicuously located and marked indicating its use. The markings should be visible in all conditions. If the automated doors are to be opened manually during a loss of power, the doors should be permanently fitted with a means for passengers to manually open the doors and be marked indicating the direction of door movement.

5. Disclaimer

This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to, nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative, you may contact MSC, the unit responsible for implementing this guidance.