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



REVIEW OF A-0 RATED ROLLER SHUTTERS IN CERTAIN A-60 BULKHEADS

Procedure Number: SOLAS-02 Revision Date: March 25, 2022

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Purpose

The purpose of this Plan Review Guideline (PRG) is to addresses roller shutters used to protect openings in a fire boundary (i.e. in lieu of doors).

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-02.

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1. Applicability

This PRG is applicable to SOLAS vessels.

2. References

SOLAS II-2/9.4.1.1.2 (previously II-2/30.2):

"The construction of doors and door frames in "A" class divisions, with the means of securing them when closed, shall provide resistance to fire as well as to the passage of smoke and flame equivalent to that of the bulkheads in which the doors are situated, this being determined in accordance with the Fire Test Procedures Code."

3. Background

Roller shutters represent an efficient method for protecting an opening in an A-60 bulkhead. In certain circumstances, an A-0 assembly with cooling provided by sprinklers or water mist can prevent the spread of fire equivalent to an A-60 barrier. In order for this to be effective, the A-0 roller shutter must be closed and water spray must wet both the inner and outer surface of the roller shutter. Storage and other obstructions must remain well clear of the roller shutters to allow complete closure of the shutter, access for the water spray to wet the surface and provide a standoff distance from any combustible materials.

4. Guidance

Openings in A-60 bulkheads, such as a galley pass-through, are often protected with steel roller shutters with a rating of A-0. These shutters when combined with (1) sprinkler protection on both sides of the shutter, (2) the requirements specified in SOLAS II-2/9.4.1.1.5 if applicable, and (3) automatic closing upon detection of a fire either by a dedicated fusible link or by activation of a local smoke detector or sprinkler, provide resistance to the passage of flame and smoke of an "A" class assembly. Sprinkler or water mist protection in close proximity to the assembly combined with the automatic closing functions of a fire door must be arranged to provide the thermal protection afforded by an A-60 assembly.

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

Home Page 2