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



REVIEW OF ALUMINUM AND GLASS REINFORCED PLASTIC (GRP) PLATE USE

Procedure Number: SOLAS-33 Revision Date: April 21, 2022

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Purpose

The purpose of this Plan Review Guideline (PRG) is to provide clear guidance on the use of alternative materials for floor plates, grids, or walkways forming part of the means of escape from machinery spaces on SOLAS passenger ships.

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-33.

E-mail: msc@uscg.mil Phone: 202-795-6730

Website: www.dco.uscg.mil/msc

1. Applicability

This PRG is applicable to SOLAS passenger ships.

2. References

SOLAS II-2/13.4.1

"Means of escape from each machinery space in passenger ships shall comply with the following provisions..."

3. Background

While not generally an issue in most accommodation areas, aluminum plates or grating can sometimes be found in machinery or other service spaces. The concern is twofold; first, that aluminum melts at temperatures typically found in most fires and, secondly, that aluminum does not appear to change its visual properties as it reaches its melting point. Thus, aluminum deck plates will not give any visual indication that they have completely lost their strength due to high heat, and could fail under the weight of an unsuspecting crewmember or firefighter.

4. Guidance

Aluminum or GRP floor plates, grids, or walkways are not acceptable for use in escape routes.

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.

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