



REVIEW OF REFRIGERATORS

Procedure Number: SOLAS-37

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Purpose

The purpose of this Plan Review Guideline (PRG) is to provide clear guidance on the fire detection, suppression and space categorization of walk-in refrigerated 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-37.

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1. Applicability

This PRG is applicable to SOLAS passenger ships carrying more than 36 passengers.

2. References

SOLAS II-2/9.2.2.3.2(11) (previously II-2/26.2.2(11))

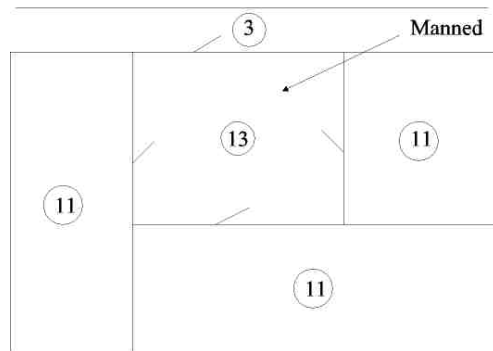
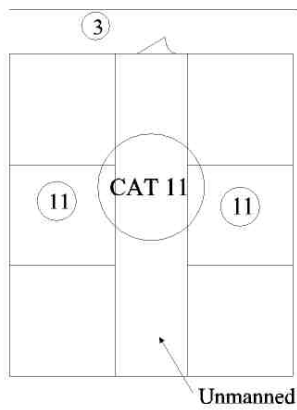
“(11) Auxiliary machinery spaces, cargo spaces, cargo and other oil tanks and other similar spaces of moderate fire risk: Refrigerated chambers.”

3. Background

Walk-in, or non-portable, refrigerated spaces are essentially store-rooms, or, if used to process food stuffs, a work space. Portable refrigerated units such as a freestanding or built-into-the-wall appliance (refrigerators in cabins, category 9 pantries, etc.) do not fall under this broad category. While SOLAS allows refrigerated spaces to be treated as category 11 spaces, it is unclear how to address fire suppression and detection for these spaces. Because a refrigerator is used to store combustibles, fire detection and suppression should be provided. Two arrangements in particular are of concern. The first is the SOLAS requirements for doors in galley boundaries (i.e., walk-in refrigerators located adjacent to or within a galley). In this case, walk-in refrigerators located entirely within the SFP boundary of the galley should not be required to meet the additional galley boundary door requirements. The second concern involves the arrangement of multiple walk-in refrigerators in a common category 11 boundary. While this arrangement would typically be acceptable because the spaces are adjacent and common-use, sometimes these refrigerators open into a common space or other area that could be used as non-refrigerated storage or a workshop. Because escape is generally not an issue from grouped or multiple walk-in refrigerators these common/other spaces should be protected as individual category 13 spaces.

4. Guidance

We expect detection and suppression to be installed within the category 11 refrigerator boundaries. If the category 11 refrigerated space is fully enclosed within a galley boundary, then the additional door requirements normally required for galley boundaries are not expected. Otherwise, the category 11 boundary may enclose multiple refrigerated chambers with the exception of areas that will be normally manned or used for non-refrigerated storage. In which case, the non-refrigerated space should be categorized as a category 13. In cases where groups of spaces are enclosed within one category 11 boundary and an area falls into the above non-refrigerated category, the category 11 designation may be maintained so long as A-class boundaries are provided between the area in question and any refrigerated chamber and adequate escape is available for manned spaces (workshops, food prep areas, etc.). The drawing below gives generic examples of acceptable arrangements.



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.