

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



REVIEW OF REGULATION 17 ALTERNATIVE DESIGN DOCUMENTATION

Procedure Number: SOLAS-14

Revision Date: June 16, 2020

A handwritten signature in blue ink that reads "Jeff Bybee".

J.B. Bybee, LCDR, Chief, Hull Division

Purpose

This Plan Review Guideline provides information regarding U.S. Coast Guard review of SOLAS Regulation 17 Alternative Design Documentation for vessels enrolled in the Initial Certificate of Compliance program.

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-14.

E-mail: msc@uscg.mil

Phone: 202-795-6729

Website: www.dco.uscg.mil/msc

Table of Contents

1. Applicability	3
2. Background.....	3
3. References.....	3
4. Reference Text.....	3
5. Guidance	3
6 Disclaimer.....	3

1. Applicability

This Plan Review Guideline (PRG) is applicable to vessels enrolled in the Initial Certificate of Compliance program.

2. Background

The increasing use of performance based designs to extend vessels beyond the prescriptive limits contained in SOLAS Chapter II-2 has created the potential for future design changes to violate assumptions contained in an alternative design. The primary means to prevent this from occurring is to ensure complete documentation of the alternative design is available to designers, class societies, and port state examiners. In order to verify these documents are available and are complete, the MSC will review and retain a copy of the final required documentation and verify during the Initial Certificate of Compliance examination that copies are available onboard the ship.

3. References

- a. SOLAS II-2/17.4.2 (previously II-2/22)
- b. MSC/Circ. 1002
- c. MSC.1/Circ. 1552

4. Reference Text

SOLAS II-2/17.4.2: A copy of the documentation, as approved by the Administration, indicating that the alternative design and arrangements comply with this regulation shall be carried on board the ship.

MSC/Circ.1002: 7.2 Documentation of approval by the Administration and the following information should be maintained onboard the ship at all times:

- .1 scope of the analysis or design, including the critical design assumptions and critical design features;
- .2 description of the alternative design and arrangements, including drawings and specifications;
- .3 listing of affected SOLAS chapter II-2 regulations;
- .4 summary of the results of the engineering analysis and basis for approval; and
- .5 test, inspection, and maintenance requirements.

MSC/Circ.1002: 7.3 Reporting and approval forms

7.3.1 When the Administration approves alternative design and arrangements for fire safety, pertinent technical information about the approval should be summarized on the reporting form given in appendix A and should be submitted to the International Maritime Organization for circulation to the Member Governments.

7.3.2 When the Administration approves alternative design and arrangements on fire safety, documentation should be provided as indicated in appendix B.

5. Guidance

Vessels in the Initial Certificate of Compliance program employing Regulation 17 to show equivalence to regulations contained in Chapter II-2, must present the completed documentation required by the regulation prior to the successful completion of MSC plan review. A final copy of this documentation must be submitted to MSC during the plan review process and be available during the ICOC.

Your attention is invited to the "Guidelines for the Selection of Life Safety Performance Criteria" contained in MSC.1/Circ.1552 when selecting Performance Criteria as discussed in MSC/Circ.1002.

6. 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.