



**GUIDE FOR**

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# **CARRIAGE OF INTEGRAL REFRIGERATED CONTAINERS ON BOARD SHIPS**

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**American Bureau of Shipping  
Incorporated by Act of Legislature of  
the State of New York 1862**

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## Foreword

This Guide provides the evaluation procedure and technical requirements to verify the eligibility of a Container Carrier for the optional notation **✕ IRCC-SP xxx/xx** (Integral Refrigerated Container Carrier – Stowage Positions).

This Guide becomes effective on **the first day of the month of publication**.

Users are advised to check periodically on the ABS website [www.eagle.org](http://www.eagle.org) to verify that this version of this Guide is the most current.

*We welcome your feedback. Comments or suggestions can be sent electronically by email to [rsd@eagle.org](mailto:rsd@eagle.org).*



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## SECTION 1 Introduction

### 1 General

The provisions of this Guide apply to container ships equipped to transport integral refrigerated containers. Where cargo is carried in refrigerated containers of plug-in or integral types which have their own individually mounted refrigeration machinery, hence requiring shipboard electrical power supply and in some cases the cooling water supply for the condensers, and where fitted, the associated temperature monitoring and control system, the *Record* will give the total number of refrigerated containers onboard, the total design load in kW and the type of temperature monitoring and control system installed.

Section 2 of this Guide provides the technical requirements for the optional notation: **✕ IRCC-SP xxx/xx (Integral Refrigerated Container Carrier – Stowage Positions)** for container ships. When requested by the Owner, the systems and arrangements for stowage of integral refrigerated containers may be verified for compliance with the requirements outlined in Section 2 of this Guide.

The Class Notation **✕ IRCC-SP xxx/xx** is supplemented by two figures, the first of which stands for the number of certified integral refrigerated container stowage positions and the second figure for the percentage of containers carrying fruit/chilled cargoes.

For example, **✕ IRCC-SP 940/35** designates that the ship is capable of the simultaneous carriage of 940 integral refrigerated cargo containers arranged on deck and/or in container holds, and a maximum of 35% of those cargo containers may be loaded with fruit or chilled cargoes. The number of integral refrigerated containers is based on FEU (forty foot equivalent units). Details concerning other container sizes, stowage positions and special conditions will be stipulated in the Class Record.

The requirements in this Guide are in addition to the classification requirements for ships contained in the *ABS Rules for Building and Classing Steel Vessels (Steel Vessel Rules)*.

### 3 Definitions

*Integral Refrigerated Container.* A standard container with a self-contained refrigeration system, located within the outer dimensions of the container, which can be driven by electrical power fed from an external power supply. The refrigeration system may be either a “clip-on” or an integral type of cooling unit.

*Container Plug-in Point.* An electrical socket located at each container location on deck and each cell location below the deck, which is in accordance with ISO 1496-2.

*Hold Space.* An enclosed space containing refrigerated containers. The containers are restrained within cell guides. If the ship is “open hatch” type, the hold space refers to the space below the hatch coamings.

*Container Cell.* This is the position of an individual container. It is typically located within a set of vertical cell guides and is normally enclosed by transverse stringers located above and below the container.

### 5 References

The following Rules, Guides, Codes and Standards are referenced in this Guide:

- *ABS Rules for Building and Classing Steel Vessels (Steel Vessel Rules)*