

START MARINE SOLUTIONS

Marine Safety Compliance Guide

Essential Regulations, Standards & Best Practices
for Maritime Safety Compliance

2026 Edition

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1. Introduction to Maritime Safety Regulations

Purpose of This Guide: This comprehensive guide provides vessel operators, safety officers, and maritime professionals with essential information on safety compliance requirements, helping ensure vessels meet international standards and protect crew members.

1.1 Key Regulatory Bodies

Maritime safety is governed by several international and regional organizations:

- **IMO (International Maritime Organization):** Sets global standards through conventions like SOLAS, MARPOL, and STCW
- **Flag State Administrations:** Enforce regulations on vessels registered under their flag
- **Classification Societies:** Verify compliance through surveys and certification
- **Port State Control:** Conduct inspections to verify visiting vessels meet standards

1.2 Principal Conventions

Convention	Focus Area	Key Requirements
SOLAS 1974	Safety of Life at Sea	Construction, equipment, operation standards
MARPOL 73/78	Pollution Prevention	Discharge regulations, equipment requirements
STCW 1978	Training & Certification	Crew competency standards

2. SOLAS Requirements Overview

The International Convention for the Safety of Life at Sea (SOLAS) is the most important international treaty concerning maritime safety. All commercial vessels engaged in international voyages must comply with SOLAS requirements.

2.1 Chapter III - Life Saving Appliances

Chapter III covers requirements for life-saving appliances and arrangements. Key equipment includes:

- Lifeboats (partially enclosed, totally enclosed, free-fall types)
- Life rafts (inflatable and rigid)
- Rescue boats
- Lifebuoys and lifejackets
- Immersion suits and thermal protective aids
- Line throwing appliances
- Emergency lighting and communications

2.2 Chapter II-2 - Fire Protection

Fire protection requirements include structural fire protection, fire detection systems, and fire-fighting equipment. All vessels must have:

- Fire detection and alarm systems
- Fixed fire-extinguishing systems
- Portable fire extinguishers
- Fireman's outfits
- Fire control plans

3. Life Saving Appliances (LSA) Code

The LSA Code provides technical specifications for all life-saving appliances required under SOLAS Chapter III. Equipment must be type-approved by recognized authorities.

3.1 Survival Craft Requirements

Vessel Type	Required Equipment	Capacity
Passenger Ships	Lifeboats + Life Rafts	125% of persons on board
Cargo Ships >85m	Lifeboats + Life Rafts	100% each side
Cargo Ships <85m	Life Rafts + Rescue Boat	100% capacity

3.2 Personal Life-Saving Equipment

- Lifejackets: One for each person on board, plus 10% additional for watch stations
- Immersion Suits: Required for all crew on cargo ships in cold water routes
- Lifebuoys: Minimum number based on vessel length, with lights and smoke signals

4. Fire Safety Systems (FSS) Code

The FSS Code provides detailed technical requirements for fire safety systems mandated by SOLAS Chapter II-2.

4.1 Fire Detection Systems

All accommodation areas, service spaces, control stations, and cargo spaces must be protected by approved fire detection systems including:

- Smoke detectors (photoelectric or ionization type)
- Heat detectors (fixed temperature or rate-of-rise)
- Flame detectors (for machinery and pump rooms)
- Manual call points throughout the vessel

4.2 Fire Extinguishing Equipment

Space Type	Required System	Agent
Machinery Spaces	Fixed system	CO2, Foam, or Water Mist
Cargo Holds	Fixed system	CO2 or Foam
Galleys	Fixed/Portable	Wet Chemical/Dry Powder
Accommodation	Sprinkler/Portable	Water/Multi-purpose

5. Personal Protective Equipment Standards

Maritime workers require appropriate PPE for various operational hazards. All PPE must meet relevant international standards.

5.1 Required PPE Categories

- Head Protection: Safety helmets (EN 397) for deck operations
- Eye Protection: Safety glasses/goggles (EN 166) for welding, grinding
- Hearing Protection: Ear muffs/plugs (EN 352) for machinery spaces
- Hand Protection: Work gloves appropriate for hazard (chemical, cut, heat)
- Foot Protection: Safety boots (EN ISO 20345) with steel toe caps
- Fall Protection: Safety harnesses (EN 361) for working at height

6. Inspection & Maintenance Requirements

Important: Regular inspection and maintenance of safety equipment is mandatory. Failure to maintain equipment can result in detentions, fines, and most importantly, loss of life.

6.1 Inspection Intervals

Equipment	Weekly	Monthly	Annual	5-Year
Lifeboats	Visual	Operational	Service	Overhaul
Life Rafts	Visual	-	Service*	-
Fire Extinguishers	Visual	Inspection	Service	Hydro Test
SCBA	-	Function	Service	Cylinder Test
Immersion Suits	-	Visual	Service	-

*Life rafts require annual servicing at approved service stations

7. Documentation & Record Keeping

Proper documentation is essential for demonstrating compliance during inspections. Key documents include:

7.1 Required Certificates

- Safety Equipment Certificate (SEC)
- Safety Radio Certificate (SRC)
- International Load Line Certificate
- Document of Compliance (DOC)
- Safety Management Certificate (SMC)

7.2 Maintenance Records

Maintain detailed records of all safety equipment inspections, tests, and servicing including:

- Dates of inspections and tests
- Deficiencies found and corrective actions
- Service reports from authorized service providers
- Drill records and training documentation

8. Compliance Checklist

Use this checklist to verify your vessel's safety compliance status:

Life Saving Equipment

- All lifeboats serviced within 12 months
- Life rafts serviced at approved station
- Sufficient lifejackets for all persons + 10%
- Immersion suits available (if required)
- EPIRB registered and battery current
- Lifebuoys with lights and smoke signals
- Line throwing apparatus tested

Fire Safety Equipment

- Fire detection system operational
- All fire extinguishers serviced
- Fixed fire-fighting systems charged
- Fireman's outfits complete
- Fire hoses and nozzles in good condition
- Emergency fire pump operational
- Fire control plans posted and current

Documentation

- Safety Equipment Certificate valid
- All equipment certificates current
- Maintenance records up to date
- Drill records documented
- Crew certificates valid

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