

Fire-fighting protective clothing

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In accordance with SOLAS ships are required to have fire-fighting protective clothing which meets the standards stated in the IMO's Fire Safety Systems Code. However, following concern that some older ships are supplied with basic fire proximity suits we are proposing to make changes to the Isle of Man's SOLAS Chapter II-2 Regulations to make the standards in this TAN for fire-fighting protective clothing mandatory. A consultation paper will be published later on this year which will include our proposals and a timeframe for when the changes will be applied.

Fire-fighting protective clothing

SOLAS Chapter II-2 Regulation 10 states the minimum number of fire-fighting outfits to be carried on board ships. All ships are required to carry at least two (Reg.10.10.2.1) and additional suits are required for passenger ships (Reg.10.10.2.2) and tankers (Reg.10.10.2.3).

The IMO's Fire Safety Systems Code applies to all fire suits required by SOLAS and stipulates they shall consist of the following:

- a) Protective clothing of material to protect the skin from the heat radiating from the fire and from burns and scalding by steam. The outer surface shall be water resistant;
- b) Boots of rubber or other electrically non-conducting material; and
- c) Rigid helmet providing effective protection against impact.

Following a recent casualty investigation, it has become apparent that some older ships are equipped with fire proximity suits¹ which, whilst complying with the above requirements for open spaces, may not provide the wearer sufficient thermal protection from radiated heat if entering an enclosed space (including machinery and accommodation spaces) where a fire is established.

The Ship Registry therefore highly recommends that any fire-fighting protective clothing which must be maintained onboard the ship in accordance with SOLAS II-2 Regulation 10.10 meets the type approval standards in accordance with the Marine Equipment Directive (MED). The latest MED standards for fire-fighting protective clothing are stated in table 1.

We also recommend that any ships which have fire-fighting protective clothing that does not comply with the appropriate MED standards or has only been tested to EN 531 standard (which is only a fire proximity standard) should have them replaced with the standards stated in Table 1. It is also recommended that fire-fighter's boots which have not been type approved to EN 15090 should also be replaced.

With the exception of EN 531 standard, all existing MED type approved equipment already fitted on board a ship is acceptable providing it remains in a suitable condition. However, when it is replaced it should be replaced with equipment meeting the latest MED standards (as stated in Table 1).



¹ Close proximity clothing stating “not suitable for fire entry”, “not a fire entry suit” or similar may be freely used for protection when boundary cooling fires or for search and rescue in an enclosed space without a fire. It may also be used **with extreme caution** for search and rescue purposes or fire-fighting within an enclosed space that also has a fire **in its early stages** (garment actual contact with flames must be avoided at all times).

Table 1

SOLAS REGULATION	EQUIPMENT	STANDARDS
SOLAS Reg 10.10.1.1	Fire-fighters outfits protective clothing (close proximity clothing)	Please note: All of the standards listed below are the latest Marine Equipment Directive standards. BS EN 469:2005; Protective clothing for firefighters. Performance requirements for protective clothing for firefighting. BS EN 1486:2007; Protective clothing for fire-fighters. Test methods and requirements for reflective clothing for specialized fire-fighting. ISO 15538:2001; Protective clothing for firefighters. Laboratory test methods and performance requirements for protective clothing with a reflective outer surface.
Reg 10.10.1.1	Fire-fighters outfits: boots	BS EN 15090:2012; Footwear for firefighters
Reg 10.10.1.1	Fire-fighters outfit: gloves	BS EN 659:2003+A1:2008 Protective gloves for firefighters
Reg 10.10.1.1	Fire-fighters outfits: helmets	BS EN 443:2008 Helmets for fire-fighting in buildings and other structures

Please note - The Isle of Man Ship Registry cannot give legal advice. Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.

