

Isle of Man Ship Registry Technical Advisory Notice

Fire-fighting protective clothing

Ref. 004-24
Issued 28 May '24

This TAN revokes and replaces the previously issued TAN 009-16.

1. Executive Summary

In accordance with SOLAS Chapter II-2, relevant ships are required to have fire-fighting protective clothing which meets the standards stated in the IMO's Fire Safety Systems Code. The purpose of this notice is to give recommendations for appropriate standards for these garments.

In summary, the Ship Registry strongly recommends that fire-fighting clothing required by SOLAS complies with the EU Marine Equipment Directive standards specified in Table 1. If choosing fire suits that comply with BS EN 469:2020, operators should consider Level 2 suits for the best protection, but this is not a requirement under MED.

2. SOLAS Requirement

SOLAS Chapter II-2 Regulation 10.10 states the minimum number of fire-fighting outfits to be carried on board ships. All SOLAS 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 (Chapter 3) 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.

3. Recommended Standards

The Ship Registry is aware that some older ships are equipped with fire proximity suits 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. Such suits are generally approved to the EN 531 Standard.

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).



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 within MED. The current MED standards for fire-fighting protective clothing are stated in Table 1 at the end of this notice. Please note that at the date of publication of this notice there are two acceptable standards for MED 3.3a (Fire-fighter's outfit: protective clothing (close proximity clothing)) which are:

- EN 469:2005 incl. A1:2006 and AC2006; or
- EN 469:2020

After **25th August 2024**, EN 469:2005 incl. A1:2006 and AC2006 will no longer be valid for new equipment placed on board a ship after this date, however there is no expectation for fire suits placed onboard prior to this date to be replaced.

We also recommend that any ships which have fire-fighting protective clothing that does not comply with the appropriate MED standard valid at the time of placing on board or has only been tested to EN 531 standard (which is only a fire proximity standard) should have them replaced with equipment meeting 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.

Apart from the two items mentioned in the above paragraph, 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).

4. BS EN 469 – Further Information

BS EN 469 makes the distinction between firefighting activities dividing them into two performance levels based on a risk assessment: level 1 and level 2. Level 2 provides higher thermal protection performance, expected in high-risk activities such as fighting fires in structures.

It should be noted that MED does not make a distinction between levels for BS EN 469 approved suits, and therefore either Level 1 or Level 2 suits should be considered as meeting the MED requirements. Nonetheless, operators may wish to voluntarily consider procuring suits that meet the Level 2 standard to provide the highest level of protection to the wearer.

The Ship Registry is aware that some PSCOs have issued deficiencies and observations to ships with Level 1 suits, stating that these fail to meet the health and safety regulations under the Maritime Labour Convention 2006, however this is not the interpretation of the Ship Registry. Level 2 is a recommended but non-mandatory standard.

This is not to be confused with fire suits approved against ISO 15538:2001 (MED 3.3c) which are to be approved to Level 2 under MED.



Table 1

EQUIPMENT	STANDARDS
Fire-fighters outfits protective clothing (close proximity clothing) SOLAS Reg 10.10.1.1	BS EN 469:2005 (MED 3.3a); Protective clothing for firefighters. Performance requirements for protective clothing for firefighting. <u>Last date for placing onboard is 25th August 2024.</u> BS EN 469:2020 (MED 3.3a). BS EN 1486:2007 (MED 3.3b); Protective clothing for fire-fighters. Test methods and requirements for reflective clothing for specialized fire-fighting. ISO 15538:2001 Level 2 (MED 3.3c); Protective clothing for firefighters. Laboratory test methods and performance requirements for protective clothing with a reflective outer surface.
Fire-fighters outfits: boots SOLAS Reg 10.10.1.1	BS EN 15090:2012 (MED 3.4); Footwear for firefighters
Fire-fighters outfit: gloves SOLAS Reg 10.10.1.1	BS EN 659:2003+A1:2008 and AC:2009 (MED 3.5) Protective gloves for firefighters
Fire-fighters outfits: helmets SOLAS Reg 10.10.1.1	BS EN 443:2008 (MED3.6) 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.

