# **ISATRA SPOTLIGHT**

# Furniture safety at sea

Testing of furniture and beds for marine vessels is governed by the International Convention for the Safety of Life at Sea.



Image © Fairline Boats Plc

Upholstered furniture and beds installed on passenger-carrying marine vessels need to comply with guidelines published by the International Maritime Organisation in order to meet Chapter II-2 ('Fire protection, fire detection and fire extinction') of the International Convention for the Safety of Life at Sea, 1974 (SOLAS 1974). The actual requirements and test methods are published in a document called the 'Fire Test Procedures 2010' (FTP). It is of paramount importance for the safety of passengers and crew on board ship that all furniture, beds and bedding are fully compliant with the SOLAS convention and that any fire tests to show compliance are properly conducted. The FTP Code provides requirements for the conduct of fire tests.

(Note: The FTP Code also specifies flammability testing requirements for floorcoverings, ceiling and deck materials, wall coverings and curtains or drapes. These are not covered in this article.)

### Upholstery

All upholstered furniture is assessed for ignition resistance from accidental sources in a similar way to the UK Furniture and Furnishings (Fire) (Safety) Regulations 1988. Ignition resulting from acts of vandalism is not

included. Ignition resistance is assessed using both smouldering cigarette and match flame sources. The test method is described in the FTP Code Annex I part 8. While there is a significant crossover with the UK Furniture Regulations, the two requirements must not be confused. Conformance with one is not normally accepted as conformance to both requirements.

#### Bedding

Beds and bedding components (including blankets, quilts, bedspreads, pillows and mattresses) are subjected to smouldering cigarette and match flame type ignition sources in order to assess behaviour in a fire situation. The test method is described in the FTP Code Annex I part 9.

## Testing and approval process

All the testing is carried out under controlled laboratory conditions and any test reports provided should contain full references to the products and materials assessed. Suppliers of furniture and beds are advised to ensure that they can demonstrate traceability of test results to production records and, if necessary, back to specific batches of materials or to specific suppliers. Tests should be carried out by a suitable laboratory that is recognised by the government of the country whose flag the ship is entitled to fly.

Suppliers of furniture and beds can choose to have items assessed under a so-called 'type approval' process or by having each product assessed for each separate installation or contract, which is often described as a 'case by case' method. Case by case approval involves testing products and the results of such tests are only valid for one specific ship.

It should be noted that detailed information is required in the test report about the materials used in the test specimen. The test laboratory must be provided with details about the composite filling materials. Without this information, the test report issued will have limited value.

## How can we help?

15 PER CENT DISCOUNT ON FIRST SATRA TEST - please click here.

Please click here for information on SATRA's furniture testing services. Email furniture@satra.com to discuss the tests used to evaluate furniture and beds for marine use.

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