

Non-Combustibility

IMO FTP Code Annex 1, Part 1 - Non-combustibility test

This information sheet describes the general principles of the fire test to determine the non-combustibility of a building material. (Please note that the test is not applicable for products which are coated, faced or laminated under specified conditions.)

Before the test

Although general rules have been adopted by IMO, interpretation of those rules may differ between national authorities and classification societies. Therefore it is important to determine which type approvals are to be obtained and to consult the relevant bodies. DBI has wide experience in co-operating with national authorities and classification societies and offers guidance about the steps, which must be taken to ensure that the process of testing will meet all the requirements.

Information Sheets: 'SHIP WHEEL-MARKING AND TYPE APPROVAL OF MARINE PRODUCTS' and 'TESTING AND INSPECTION FOR USGC'.

General

Where a material is required to be non-combustible, it shall be determined in accordance with this part.

The method is described in full in the international standard ISO 1182:2002.

Test procedure

The test is performed in an open vertically positioned cylindrical furnace. The furnace is heated to 750°C before the test specimens are inserted into the furnace.

For each test, five test specimens shall be used. The test specimens shall be cylindrical and each shall have a diameter of 45 mm and a height of 50 ± 3 mm.

During the test, the following observations will be recorded:

The average furnace temperature, the average surface temperature, the mean duration of sustained flaming and the average mass loss.

Classification criteria

The non-combustibility shall be verified in accordance with all the following criteria:

- 1 the average furnace thermocouple temperature rise as calculated in 8.12 of ISO 1182 does not exceed 30° C.
- 2 the average surface thermocouple temperature rise as calculated in 8.12 of ISO 1182 does not exceed 30° C.
- 3 the mean duration of sustained flaming as calculated in 8.2.2 of ISO 1182 does not exceed 10 seconds; and
- 4 the average mass loss as calculated in 8.3 of ISO 1182 does not exceed 50%.

Test report

The test report will be written in English. It will contain all necessary information about the test specimen, test results and classification.

For further information you are welcome to contact



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