

SC 264 Non-combustible material as 'steel or equivalent' for ventilation ducts (SOLAS II-2, Reg. 9.7.1.1)

(Dec 2013)
(Corr.1 Dec 2023)

SOLAS II-2, Reg. 9.7.1 states:

7.1.1 Ventilation ducts, including single and double wall ducts, shall be of steel or equivalent material except flexible bellows of short length not exceeding 600 mm used for connecting fans to the ducting in air-conditioning rooms. Unless expressly provided otherwise in paragraph 7.1.6, any other material used in the construction of ducts, including insulation, shall also be non-combustible. However, short ducts, not generally exceeding 2 m in length and with a free cross-sectional area* not exceeding 0.02 m², need not be of steel or equivalent material, subject to the following conditions:

- .1 the ducts shall be made of non-combustible material, which may be faced internally and externally with membranes having low flame-spread characteristics and, in each case, a calorific value** not exceeding 45 MJ/m² of their surface area for the thickness used;*
- .2 the ducts are only used at the end of the ventilation device; and*
- .3 the ducts are not situated less than 600 mm, measured along the duct, from an opening in an "A" or "B" class division, including continuous "B" class ceiling.*

* The term free cross-sectional area means, even in the case of a pre-insulated duct, the area calculated on the basis of the inner dimensions of the duct itself and not the insulation.

** Refer to the recommendations published by the International Organization for Standardization, in particular publication ISO 1716:2002, Reaction to the fire tests for building products – Determination of the heat of combustion.

Interpretation

With respect to SOLAS II-2/9.7.1.1, a ventilation duct made of material other than steel may be considered equivalent to a ventilation duct made of steel, provided the material is non-combustible and has passed a standard fire test in accordance with Annex 1: Part 3 of the FTP Code as non-load bearing structure for 30 minutes following the requirements for testing "B" class divisions.

End of Document

NOTES:

1. This Unified Interpretation is to be uniformly implemented by IACS Societies for ships contracted for construction on or after 1 July 2015.
2. The "contracted for construction" date means the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. For further details regarding the date of "contract for construction", refer to IACS Procedural Requirement (PR) No. 29.