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**Ships and marine technology - Air-conditioning and ventilation of accommodation spaces - Design conditions and basis of calculations**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 7547:2005 sisaldab Euroopa standardi EN ISO 7547:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.02.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 7547:2005 consists of the English text of the European standard EN ISO 7547:2004.</p> <p>This document is endorsed on 22.02.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This International Standard specifies design conditions and methods of calculation for air-conditioning and ventilation of accommodation spaces and the radio cabin on board seagoing merchant ships for all conditions except those encountered in extremely cold or hot climates (i.e. with lower or higher conditions than those stated in 4.2 and 4.3).</p>	<p><b>Scope:</b> This International Standard specifies design conditions and methods of calculation for air-conditioning and ventilation of accommodation spaces and the radio cabin on board seagoing merchant ships for all conditions except those encountered in extremely cold or hot climates (i.e. with lower or higher conditions than those stated in 4.2 and 4.3).</p>
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ICS 47.020.80, 47.020.90

Võtmesõnad:

ICS 47.020.80; 47.020.90

English version

Ships and marine technology – Air-conditioning and  
ventilation of accommodation spaces

Design conditions and basis of calculations  
(ISO 7547:2002)

Navires et technologie maritime –  
Conditionnement d'air et ventilation  
des emménagements – Conditions de  
conception et bases de calcul  
(ISO 7547:2002)

Schiffe und Meerestechnik – Klimati-  
sierung und Lüftung von Unterkunfts-  
räumen auf Schiffen – Grundlagen für  
Entwurf und Auslegung  
(ISO 7547:2002)

This European Standard was approved by CEN on 2004-12-21.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Management Centre: 36, rue de Stassart, B-1050 Brussels**

## Foreword

International Standard

ISO 7547:2002 Ships and marine technology – Air-conditioning and ventilation of accommodation spaces – Design conditions and basis of calculations,

which was prepared by ISO/TC 8 ‘Ships and marine technology’ of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 300 ‘Sea-going vessels and marine technology’, the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2005 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 7547:2002 was approved by CEN as a European Standard without any modification.

## Contents

	Page
Foreword .....	2
1 Scope .....	3
2 Normative references .....	3
3 Terms and definitions .....	3
4 Design conditions .....	4
4.1 General .....	4
4.2 Summer temperatures and humidities .....	4
4.3 Winter temperatures .....	4
4.4 Outdoor air .....	4
4.5 Occupancy .....	5
5 Calculation of heat gains and losses .....	5
5.1 Applicability .....	5
5.2 Heat transmission .....	5
5.3 Solar heat gain .....	9
5.4 Heat gain from persons .....	9
5.5 Heat gain from lighting and other sources .....	10
6 Airflow calculation .....	10
6.1 Volume of space .....	10
6.2 Supply airflow .....	10
6.3 Temperature of supply airflow .....	11
6.4 Exhaust airflow .....	11
6.5 Air balance .....	11
Annex A (informative) Guidance and good practice in the design of ventilation and air-conditioning systems in ships .....	12
Annex B (informative) Thermal conductivities of commonly used construction materials .....	15

## 1 Scope

This International Standard specifies design conditions and methods of calculation for air-conditioning and ventilation of accommodation spaces and the radio cabin on board seagoing merchant ships for all conditions except those encountered in extremely cold or hot climates (i.e. with lower or higher conditions than those stated in 4.2 and 4.3).

Annex A provides guidance and details of good practice in the design of ventilation and air-conditioning systems in ships.

Annex B gives the thermal conductivities of commonly used construction materials.

Users of this International Standard should note that, while observing the requirements of this International Standard, they should at the same time ensure compliance with statutory requirements, rules and regulations as may be applicable to the individual ship concerned.

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 31-4:1992, *Quantities and units — Part 4: Heat*

ISO 3258:1976, *Air distribution and air diffusion — Vocabulary*

## 3 Terms and definitions

For the purposes of this International Standard, the definitions given in ISO 31-4, ISO 3258 and the following apply.

### 3.1

#### **accommodation**

space used as public rooms, cabins, offices, hospitals, cinemas, games and hobby rooms, hairdressing saloons and pantries without cooking appliances

### 3.2

#### **air-conditioning**

form of air treatment whereby temperature, humidity, ventilation and air cleanliness are all controlled within limits prescribed for the enclosure to be air-conditioned