

**Kodumajapidamises ja väljaspool seda
kasutatavad gaasiküttel õhusoojendid.
Lisanõuded kondenseerivatele
õhusoojenditele**

Domestic and non-domestic gas-fired air heaters -
Supplementary requirements for condensing air
heaters

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1196:1999 sisaldab Euroopa standardi EN 1196:1998 ingliskeelset teksti.	This Estonian standard EVS-EN 1196:1999 consists of the English text of the European standard EN 1196:1998.
Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: See standard määrab kindlaks täiendavad nõuded ja katsetusmeetodid gaasiküttel õhusoojendite jaoks, mis on valmistatud nii, et veeaur kondenseerub põlemissaadustest. Selles küsimuses laiendab standard Euroopa standardeid EN 778 ja prEN 1319 kodumajapidamises kasutatavate õhusoojendite ning standardeid EN 621 ja EN 1020 mujal kasutatavate õhusoojendite osas.	Scope:
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Võtmesõnad: gaasiseadmed, kasutusnõuded, kondensatsioon, määratlused, paigaldus, projekteerimine, seadmete tehnilised andmed, soojaõhuküte, tehnilised märkused, testimine, tööomaduste hindamine, veeaur, õhusoojendid, ärakasutamine

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Descriptors: Air heaters, gas appliances, requirements.

English version

Domestic and non-domestic gas-fired air heaters

Supplementary requirements for condensing air heaters

Générateurs d'air chaud à usages domestique et non domestique utilisant les combustibles gazeux – Exigences complémentaires pour les générateurs d'air chaud à condensation

Gasbefeuerte Warmluft erzeuger für den häuslichen und den nicht-häuslichen Gebrauch – Zusätzliche Anforderungen an kondensierende Warmluft erzeuger

This European Standard was approved by CEN on 1998-03-26.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 179 "Gas-fired air heaters", the secretariat of which is held by NNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 1998 and conflicting national standards shall be withdrawn at the latest by December 1998.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports Essential Requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the additional requirements and test methods for gas-fired air heaters which are so designed that water vapour condenses from combustion products. On this subject it extends the European standards EN 778 and EN 1319 for domestic, and EN 621 and EN 1020 for non-domestic air heaters.

This standard applies to gas-fired air heaters with or without a fan in the combustion circuit in one of the following constructional types:

- an integral air heater with at least one condensing heat exchanger;
- a non-condensing air heater with an integrated additional condensing heat exchanger;
- a non-condensing air heater, with an integrated additional condensing heat exchanger for the recovery of heat from combustion products and from ventilation air if appropriate.

This European Standard covers type-testing only.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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| EN 621 | Non-domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW, without a fan to assist transportation of combustion air and/or combustion products |
| EN 778 | Domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 70 kW, without a fan to assist transportation of combustion air and/or combustion products |
| EN 1020 | Non-domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW, incorporating a fan to assist transportation of combustion air and/or combustion products |
| EN 1319 | Domestic gas-fired forced convection air heaters for space heating, with fan-assisted burners not exceeding a net heat input of 70 kW |

3 Definitions

For the purposes of this standard, the following definitions apply and supplement the definitions in the aforementioned air heater standards:

3.1 condensing air heater: Air heater in which, under normal operating conditions, the water vapour in the combustion products is totally or partially condensed in order to make use of the latent heat in this water vapour for heating purposes.

3.2 condensate: The liquid formed from the combustion products during the condensation process.

3.3 condensate collecting device: The part of the appliance designed to collect the condensate in order that it can be drained.