Safety of Gas Appliances

(Short guide on the application of EU-Directive 2009/142/EC on appliances burning gaseous fuels)

Are you manufacturing, importing or distributing gas appliances? Do you know about the legislation these products have to comply with? Could you prove at any time, that your products are conforming to the valid safety requirements? No?
Then you should read this short guide very carefully.

Legal Framework

− European Union

− in Jordan
The transposition of the the Gas Appliances Directive (GAD) in Jordan was made in the Technical Regulation …., published in … on … and went in force on …. From that date all economic operators in the gas appliances sector of Jordan have mandatory to comply with these legal requirements for the safety of gas appliances.

Where applicable also other EU directives could be relevant, like e.g. the General Product Safety Directive 2001/95/EC, the directive on Electromagnetic Compatibility 2004/108/EC or the Low Voltage Directive 2006/95/EC (see separate short guides).

Scope

The GAD is to apply for every gas appliance made available on the market in Jordan as well as in the European Economic Area (EEA).
The directive shall apply to appliances and fittings. Appliances specifically designed for use in industrial processes carried out on industrial premises shall be excluded from its scope.

Which devices are covered?

Under the scope of GAD are ‘appliances’ burning gaseous fuels used for cooking, heating, hot water production, refrigeration, lighting or washing.
Where applicable, a normal water temperature is not exceeding 105 °C. Forced draught burners and heating bodies to be equipped with such burners shall also be considered as appliances.
‘Fittings’ means safety devices, controlling devices or regulating devices and sub-assemblies, other than forced draught burners and heating bodies to be equipped with such burners. They are separately marketed for trade use and designed to be incorporated into an appliance burning gaseous fuel or assembled to constitute such an appliance.
‘Gaseous fuel’ means any fuel which is in a gaseous state at a temperature of 15 °C under a pressure of 1 bar.
For the purposes of this Directive, an appliance is said to be ‘normally used’ when it is:
• Correctly installed and regularly serviced in accordance with the manufacturer’s instructions,
• Used with a normal variation in the gas quality and a normal fluctuation in the supply pressure,
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- Used in accordance with its intended purpose.

Who is concerned?
The requirements of the directive are affecting manufacturer or authorized representatives of the manufacturer as well as importers and distributors, who are making gas appliances available on the market.

Requirements / Content
Appliances and fittings under the scope of the directive have to comply with the essential requirements defined in Annex I of the directive. They must be manufactured in such a way, that they do not endanger the safety of persons, pets and goods, if they are used as intended.

Structure of the essential requirements according to Annex I of GAD

- General conditions
  - Safety operations;
  - Technical instructions for the installer, instruction for use and serving, warning notices;
  - Requirements for fittings;
- Materials (mechanical, chemical and technical properties);
- Design and construction
  - Protection measures against mechanical risks (e.g. stability, deformation…);
  - Environmental impacts;
  - Requirements for electrical safety;
  - Controlling and setting devices;
- Unburned gas release;
- Ignition (Ignition and re-ignition);
- Combustion
  - Flame stability;
  - Combustion products and their proper release;
- Rational use of energy;
- Temperatures (surface temperatures);
- Foodstuffs and water used for sanitary purposes.

Harmonized Standards
The essential safety requirements of the directive are specified in harmonized European Standards, which are published with relation to the directive. The official list of harmonized standards can be downloaded free of charge from:

What are the obligations?
The GAD is requiring CE marking of each appliance for burning gaseous fuels under the scope of the directive. Pre-condition for the CE marking is, that a conformity assessment procedure was performed, which approves the compliance with the requirements of the directive.
The manufacturer or his authorized representative must submit an application for EC Type Examination to a Notified Body and must provide a representative sample for testing. After receiving the Certificate he has to issue a “EC Declaration of Conformity” and to affix CE marking together with the number of the notified body involved. The product must be accompanied by the instructions mentioned above.
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Procedures for certification of conformity

According to Annex II of the GAD the following different procedures for the certification of conformity are possible:

1. EC Type-Examination combined with the procedures 2 to 5

2. EC Declarationof Conformityto Type
3. EC Declarationof Conformityto Type (guarantee of production quality)
   Quality system-----EC-surveillance
4. EC Declaration ofType Conformity (guarantee of product quality)
   Quality system-----EC-surveillance
5. EC Verification
6. EC Unit Verification

The conformity assessment procedures have to be applied according to the following scheme (see flowchart below). In any case the involvement of a Notified Body (Testing and Certification Institute) is mandatory!

Figure.1: The conformity assessment procedures
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Notified Body

RSS Royal Scientific Society
P.O.Box 1438
Amman 11941
The Hashemite Kingdom of Jordan
Tel. +962 6 53 44 701
Fax +962 6 53 44 806
e-Mail rssinfo@rss.jo

Other Notified Bodies

The contact details of all Notified Bodies can be obtained from NANDO database:
http://ec.europa.eu/enterprise/newapproach/nando

Design Documentation Prepared by the Manufacturer

The design documentation must contain the following information, in so far as is required by the notified body for assessment:

- a general description of the appliance,
- conceptual designs and manufacturing drawings and diagrams of components, sub-assemblies, circuits, etc.,
- descriptions and explanations necessary for the understanding of the above, including the operation of the appliances,
- a list of the standards referred to in Article 5, applied in full or in part, and descriptions of the solutions adopted to meet the essential requirements where the standards referred to in Article 5 have not been applied,
- test reports,
- Manuals for installation and use.

Where appropriate, the design documentation must contain the following elements:

- attestations relating to the equipment incorporated in the appliance,
- attestations and certificates relating to the methods of manufacture and/or inspection and/or monitoring of the appliance,
- any other document making it possible for the notified body to improve its assessment.

EC Declaration of Conformity

The EC declaration of conformity is that part of the procedure whereby the manufacturer declares that the appliances concerned are in conformity with the type as described in the EC type-examination certificate and satisfy the essential requirements of this Directive which apply to them.

The manufacturer or his authorized representative established within the Community shall affix the CE marking on each appliance and draw up a written declaration of conformity. The declaration of conformity may cover one or more appliances and must be kept by the manufacturer.
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CE marking and Inscriptions

As a symbol for the conformity with the requirements of the directive, the manufacturer or his authorized representative has to affix CE marking on the product or the type plate. It must be visible, legible and undeletable affixed.

The minimum height of the CE marking is 5 mm. The proportions given in the graduated drawing must be respected. The CE marking must be followed by the identification number of the notified body.

The appliance or its data plate must bear the CE marking together with the following inscriptions:

- the manufacturer’s name or identification symbol,
- the trade name of the appliance,
- the type of electrical supply used, if applicable,
- the appliance category,
- the last two digits of the year in which the CE marking was affixed.

Information needed for installation purposes may be added according to the nature of the appliance.

Where to get full texts of legislation and standards?

(Download free of charge)

Jordan legislation http://jsmo.gov.jo

Important!

Economic operators affected by that legislation should read not only this short guide but also pay attention to the full text of the directive 2009/48/EG. Additional the officially published guidance papers could give essential support:


More Information and technical help

Information and technical help services for Jordan economic operators are offered by the JSMO information centre

www.jsmo.gov.jo
Published Short Guides to EU Directives

- 2006/95/EG Low Voltage Directive (electrical safety)
- 2009/48/EG Safety of Toys
- 2004/108/EG Electromagnetic Compatibility
- 2009/142/EG Gas Appliances
- 2001/95/EG General Product Safety

CE marking – Overview on framework regulations

All the short guides can be downloaded from the website of JSMO Jordan Standards and Metrology Organization.

http://www.jsmo.gov.jo

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