

Gas Appliances Directive (90/396/EEC)	
GUIDANCE C 3	Approved by WG -GA 02- 2005

Guideline related to:

ANNEX	II	Procedure for certification of conformity
Section	2	EC declaration of conformity to type
Paragraph	2.3.	
Subject	On-site checks surveillance	

2.3. On-site checks of appliances must be undertaken at random by the notified body at intervals of one year or less. An adequate number of appliances must be examined and appropriate tests as set out in the applicable standards referred to in Article 5 or equivalent tests must be carried out in order to ensure conformity with the corresponding essential requirements of this Directive. The notified body shall in each case determine whether these tests need to be carried out in full or in part. Where one or more appliances are rejected, the notified body shall take the appropriate measures to prevent the marketing thereof.

Question

How should on-site checks of gas appliances and fittings be organised in order to ensure compliance?

Discussion

Both the manufacturer and the Notified Body have obligations. The manufacturer shall assure access for the chosen Notified Body to the CE type-examination and related test report and design documentation and must ensure the provision of facilities for the inspection of his products, produced and CE marked under the responsibility of the Notified Body.

The Notified Body may take account of the existence of a manufacturer's quality system with the view to reduce the extent of the inspection. Under these circumstances the Notified Body shall have access to the production line. It shall verify the tests and quality system elements performed by the manufacturer, to achieve conformity with the type.

The Notified Body can at all times, at least once a year, visit the warehouses of the manufacturer or the warehouse of his appointed representative to take one or more samples of the products registered with the Notified Body from a sufficiently representative quantity and on the basis of inspection sheets, test reports and check lists insofar as such exist, to compare whether the samples comply with the type as described in the EC type-examination certificate and with the Essential Requirements of the gas appliance Directive. The manufacturer or his appointed representative shall provide the necessary support.

This guidance is for information only; it has no formal status

Reference: 90/396/EEC "Gas appliances directive" O.J. L 196, 26.07.90, p. 15

Source of guidance document: GADAC

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If the Notified Body is of the opinion that a product must be submitted to inspection test, and also that the inspection cannot be carried out with in-house test equipment, the products which he selects and marks (e.g. with a lead seal) shall be sent to a test laboratory specified by the Notified Body.

The amount of the verification work from the Notified Body shall be concentrated upon verification of critical points, which characterize the safety of the appliance and thereby fulfil the Essential Requirements of the Directive.

The verification of critical points implies that test of the final products is carried out for principal controls.

In the Annex are given the list of principal controls, which cover the majority of current gas appliances.

Nevertheless some special appliances may be subject to other requirements with regard to a different technology or design. In such a case the Notified Body shall determine the complementary test. Equally, for certain designs some of the following principal controls may not apply.

The manufacturer has to take all necessary measures to ensure that the manufacturing process results in conformity of appliances with the Essential Requirements of the above-mentioned Directive. He may carry out the under mentioned principal controls, foremost at the end stage of the production and in an adequate way regarding his own manufacturing methods and facilities.

The Notified Body must verify the correct result of the principal controls by assuring the documentation and by taking individual responsibilities for issuing a certificate of conformity as a result of the surveillance and considers the under mentioned principal controls as a basis for confirming the conformity of the gas appliance.

According to the procedures for certification of conformity (Annex II of GAD) the Notified Body may perform further appropriate examinations and determine whether these tests need to be performed in full or in part to ensure the conformity of the products with the type. In doing so it applies its own methods and procedures and may have informed the manufacturer thereof in advance.

Conclusion

The Notified Body may take account of all activities, initiated by the manufacturer's to assure conformity with the CE type-examination certificate, but must assure that all relevant principal controls are carried out on the basis of the list, as the example given in Annex.

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List of principal controls (tests on the final Product)

1. Leakage rate of the components conveying gas (inside and outside)
2. Nominal flow rates and nominal heat input
3. Leakage rate of the components conveying water
4. Working appliance:
 - ignition
 - burners
 - auxiliary equipment and fittings
 - safety ignition devices and flame monitoring
5. Components (shut-off valves, thermostats,...)
6. Combustion:
 - flame stability
 - combustion quality
 - critical emission limits (CO, CO₂)
 - tightness of the exhaust gas extraction system
 - tightness of the combustion circuit in type B/C appliances
 - exhaust gas monitor
 - atmosphere monitor
7. Efficiency
8. Safety and regulating systems (governors)
9. Surface temperatures
10. Electrical tests covered by the Low Voltage Directive
 - special electrical test may be required
 - recommendation for tests relating to (CENELEC EN 50106)
 - earthing continuity
 - dielectric strength

NOTE : *The manufacturer has to assure proof of the compliance with the safety objectives of electrical hazards laid down in the Low Voltage Directive (73/23/EEC).*

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Examples of models for verification by the Notified Body

Type of Inspections	Requirements to Subcontractors	Continuous control during production	End stage Control
1. Internal and External leakage rate			
Model 1		+ (100%)	
Model 2			+ (100 %)
2. Nominal Heat input			
Model 1	+ SPC		+ (spot check)
Model 2		+ (100%)	
Model 3		+ SPC	+ (spot check)
3. Leakage rate of water circuit			
Model 1	+ (100 %)		
Model 2		+ (100%)	
Model 3			+ (100 %)
4. Appliance operation			
			+ (100 %)
5. Components			
Model 1	+ SPL		+ (spot check)
Model 2		+ (100%)	
Model 3			+ (100 %)
6. Combustion			
6.1 Flame stability			+ (100 %)
6.2 Combustion quality			+ (spot check)
6.3 Soundness of combustion circuit			+ (spot check)
6.4 Safety components			+ (100 %)
7. Efficiency			
			+ (spot check)
8. Electrical Safety			
Model 1	+ SPC		+ (spot check)
Model 2		+ (100%)	
9. Surface temperatures			
			+ (spot check)

SPC = Statistical Process Control

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