



**ACS. NON-DOMESTIC CORE GENERIC PART B  
SAFETY ASSESSMENT CRITERIA  
INITIAL & RE-ASSESSMENT  
NATURAL GAS AND LPG  
CORE SECTORS**

**ND CORE GENERIC PART B****INITIAL & RE-ASSESSMENT****Introduction**

Tests the gas safety competence of an operative in core areas of non-domestic gas work common to non-domestic heating, catering and laundry sectors.

**Comprises:**

3. Products and characteristics of combustion (for natural draught burners)
- ~~5. Installation of pipework and fittings (sizes 6mm to 50mm)~~
6. Tightness testing and purging (of appliance pipework connections)
7. Checking and/or setting meter regulators (and supply/appliance regulators)
8. Unsafe situations, use of emergency notices and warning labels
9. Operation and positioning of emergency isolation controls and valves
10. Operation and checking of appliance gas safety devices and controls
15. Re-establish existing gas supply and relight appliances.

CBs may adopt Competence and Criteria numbering different to that used in this document.

CB documentation may adopt wording for criteria different to that used in this document, provided the meaning is unaffected.

**Range**

Generic non-domestic heating, catering and laundry sector common core areas.

**Pre-requisites****Initial**

ND Core Generic Part A.

**Re-assessment**

ND Core Generic Part A +  
ND Core Generic Part B.

**References and normative documents**

MIs.

All relevant documents as listed in the Legislative, Normative & Informative Document List (LINDL), inc.:

- HSL56
- GIUSP.

ACS.SMB.003.ACRND identifies Normative Documents that should be held by the AC.

**Abbreviations**

AC. Assessment Centre  
 CB. Certification Body  
 GT. Gas Transporter  
 I. Initial  
 LDF. Leak detection fluid  
 MIs. Manufacturer's/manufacturers' instructions  
 ND. Non-domestic  
 OP. Operating pressure  
 OQ. Oral questioning  
 Ref. Reference.

**3. Products and characteristics of combustion (for natural draught burners)**

PERFORMANCE CRITERIA	REF	I	R
1. <b>inspect flame pictures of selection of natural draft atmospheric burners and identify those indicating:</b>			
(i) complete combustion		√	
(ii) incomplete combustion		√	
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. main constituents of complete and incomplete combustion		√	
2. air requirements for complete combustion		√	
3. <b>visual signs of incomplete combustion:</b>			
(i) around appliance location		√	
(ii) in the appliance		√	
4. <b>causes of appliance incomplete combustion at:</b>			
(i) burner or catalytic bed		√	
(ii) combustion space		√	
(iii) heat exchanger		√	
(iv) flue		√	
5. symptoms of CO poisoning		√	
6. advice to person describing symptoms of being affected by combustion products		√	
7. identify unsafe situation relating to combustion products that could enter premises		√	
8. Awareness of regional differences in Building Regulations regarding CO detection when installing new or replacement fixed combustion appliances.	GSR ISU 037	√	√

**6. Tightness testing and purging (appliance pipework connections, volume ≤ 0.12m<sup>3</sup>)**

PERFORMANCE CRITERIA	REF	I	R
1. turn off appliance isolation valve		√	√
2. assemble suitable pressure gauge and zero		√	√
3. connect pressure gauge to pressure test point or burner injector		√	√
4. by-pass appliance regulator or screw down to maximum outlet pressure to prevent lock-up during test (OQ)		√	√
5. ensure gas is present on inlet side of valve; test appliance isolation valve for let-by (at 50% OP for 2 minutes)		√	√
6. re-pressurise connection by gas or air to at least OP		√	√
7. close off pressurising medium		√	√
8. observe gauge for 2 minutes		√	√
9. allow no perceptible drop on gauge		√	√
10. re-establish gas supply to appliance and purge of air		√	√
11. re-establish appliance regulator and re-set to MIs (OQ)		√	√
12. remove gauge, re-establish test point and check using LDF		√	√
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. max. pipework volume for test for heating and laundry and for catering		√	√
2. procedures when appliance connector pipework exceeds volume allowed		√	√
3. availability of appropriate certificates for pipework prior to appliance connection		√	

**7. Checking and/or setting meter regulators (and supply/appliance connectors)**

PERFORMANCE CRITERIA	REF	I	R
1. turn off all appliances/equipment		√	√
2. zero gauge and connect to meter test point		√	√
3. observe and record standing pressure at test point		√	√
4. turn on gas appliances		√	√
5. read and record OP on gauge (21 mbar)		√	√
6. adjust supply/appliance regulator (other than meter regulator), if required		√	√
7. if reading on meter regulator is incorrect (outside 19 – 23 mbar), use correct procedure for notifying GT		√	√

8.	remove gauge; re-seal test point and test for tightness		√	√
<b>KNOWLEDGE &amp; UNDERSTANDING</b>				
1.	effects of pressure absorption across primary meter installation		√	
2.	operation of a gas meter or other non-domestic supply regulator		√	
3.	sealing regulators. HSL56. Reg. 14 Regulators 4(1), (5), (6) (a) and (7)		√	

## 8. Unsafe situations, use of emergency notices and warning labels

PERFORMANCE CRITERIA	REF	I	R
1. identify and label defective appliance(s)		√	√
2. multiple chimney/flue defects that default to AR	GUIISP Edition 7.1	√	√
3.			

## 9. Operation and positioning of emergency isolation controls and valves

PERFORMANCE CRITERIA	REF	I	R
1. the incorrectly positioned emergency isolation control/interlock/valve is identified			√
2. the correct procedure for dealing with incorrectly positioned emergency isolation control/interlock/valve is demonstrated			√
3. the correct labels are identified and attached to the emergency isolation control/interlock/valve			√
4. types of emergency automatic isolation valves used in ND establishments			√
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. requirements for gas proving systems and interlocks			√
2. requirements for automatic emergency control stop buttons/controls			√

## 10. Operation and checking of appliance gas safety devices and controls

PERFORMANCE CRITERIA	REF	I	R
1. check operation of each gas safety control/device is to MIs and identify clearly		√	√
2. identify controls/devices not working correctly by operation and/or visual, audible methods		√	√
3. isolate gas and electricity supplies, where necessary		√	
4. repair or replace faulty controls/devices, to MIs		√	
5. re-establish gas and electricity supplies, where necessary		√	
6. check work carried out is gas tight		√	
7. confirm correct operation of repaired/replaced controls/devices, to MIs		√	
8. explain safe operation of controls/devices		√	√
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. data critical for correct spare part identification of controls/devices		√	
2. explain principle of operation of controls/devices		√	
3. explain sequence of operation of control/device switches and valves		√	
4. requirements when modifying non-domestic appliances (GSIUR 26)		√	√

## 15. Re-establish existing gas supply and relight appliances

PERFORMANCE CRITERIA	REF	I	R
1. check installation is gas tight		√	
2. re-establish gas supply		√	
3. <b>check appliance(s)/equipment visually and re-light inc.:</b>			
(i) purge system and appliance(s)/equipment of air		√	
(ii) light appliance(s)/equipment		√	
(iii) confirm satisfactory operation of user controls		√	
(iv) visually inspect appliance/equipment/installation(s) for unsafe situations		√	
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. describe action when un-commissioned appliance/equipment is identified		√	
2. confirm actions if pipework, appliance(s) or equipment are not tested (commissioned) when gas supply is re-established		√	
3. <b>HSL56:</b>			
(i) Reg. 33 Testing of appliances 33 (1) to (3)		√	

(ii) Reg. 26 Gas appliances		√	
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