



**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)
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.

Exclusions**CC6 Note:**

An installation with a range \geq than 0.12m³ or operating at a pressure higher than 21mbar would not be suitable for this Application, where the above parameters are exceeded an Appliance Connector test must be carried using the relevant sections of IGEM/UP/I or 1A as applicable, and the operative must hold additional TPCP1 or TPCP1A elements as appropriate.

References and normative documents

MIs.

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

- HSL56
- GIUSP.
- IGEM/UP/1

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. inspect flame pictures of selection of natural draft atmospheric burners and identify those indicating:			
(i) complete combustion		✓	
(ii) incomplete combustion		✓	
KNOWLEDGE & UNDERSTANDING			
1. main constituents of complete and incomplete combustion		✓	
2. air requirements for complete combustion		✓	
3. visual signs of incomplete combustion:			
(i) around appliance location		✓	
(ii) in the appliance		✓	
4. causes of appliance incomplete combustion at:			
(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.		✓	✓

6. Appliance Connection Test:

Tightness testing of appliance to pipework connection test (volume up to 0.12m³ and a diameter not exceeding 35mm or 1^{1/4}) (found in IGEM/UP/1, Section 5 (5.9) Appliance Connector)

PERFORMANCE CRITERIA	REF	I	R
1. turn off appliance isolation valve		✓	✓
2. assemble and zero suitable pressure gauge		✓	✓
3. connect gauge to pressure test point or burner injector		✓	✓
4. by-pass appliance regulator or screw down to its maximum outlet pressure (to prevent lock-up) (OQ)		✓	✓
5. test appliance isolation valve for let-by after first ensuring gas is present on inlet side of isolation valve. (50% OP for 2minutes)		✓	✓
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 and re-establish test point and check using LDF		✓	✓
KNOWLEDGE AND UNDERSTANDING			
1. maximum volume of pipework to which test can be applied		✓	✓
2. procedures where appliance connector pipework exceeds volume allowed of 0.12m ³ and diameter exceeds 35mm.		✓	✓
3. appropriate recorded certificates for installation pipework prior to appliance connector test carried out.		✓	✓

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		✓	✓
KNOWLEDGE & UNDERSTANDING			
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. label unsafe appliance(s) / installation(s)		✓	✓
2. multiple chimney/flue defects that default to AR		✓	✓

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			✓
KNOWLEDGE & UNDERSTANDING		I	R
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		✓	✓
KNOWLEDGE & UNDERSTANDING				
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.	check appliance(s)/equipment visually and re-light inc.:		✓	
(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		✓	
KNOWLEDGE & UNDERSTANDING			I	R
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.	HSL56:			
(i)	Reg. 33 Testing of appliances 33 (1) to (3)		✓	
(ii)	Reg. 26 Gas appliances – safety precautions 26 (1) to (10)		✓	
(iii)	Reg. 26 Gas appliances 9 (ca)			✓