

# 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.

#### **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)

PER	FORMANCE 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		✓	
KNO	WLEDGE & 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		$\checkmark$	
(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 $\leq$ 0.12m3)

PERI	FORMANCE CRITERIA	REF	I	R
1.	turn off appliance isolation valve		✓	$\checkmark$
2.	assemble suitable pressure gauge and zero		✓	$\checkmark$
3.	connect pressure gauge to pressure test point or burner injector		✓	$\checkmark$
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		✓	$\checkmark$
7.	close off pressurising medium		$\checkmark$	$\checkmark$
8.	observe gauge for 2 minutes		$\checkmark$	$\checkmark$
9.	allow no perceptible drop on gauge		✓	$\checkmark$
10.	re-establish gas supply to appliance and purge of air		✓	$\checkmark$
11.	re-establish appliance regulator and re-set to MIs (OQ)		✓	$\checkmark$
12.	remove gauge, re-establish test point and check using LDF		✓	$\checkmark$
KNO	WLEDGE & UNDERSTANDING			
1.	max. pipework volume for test for heating and laundry and for catering		✓	$\checkmark$
2.	procedures when appliance connector pipework exceeds volume allowed		✓	$\checkmark$
3.	availability of appropriate certificates for pipework prior to appliance connection		✓	

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

PER	FORMANCE 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		$\checkmark$	$\checkmark$
KNC	WLEDGE & UNDERSTANDING			

ACS.SMB.004.AC.TABLE 4. NON-DOMESTIC CORE GENERIC PART B.CORE SECTORS.INITIAL & RE-ASSESSMENT

1.	effects of pressure absorption across primary meter installation	$\checkmark$
2.	operation of a gas meter or other non-domestic supply regulator	$\checkmark$
3.	sealing regulators. HSL56. Reg. 14 Regulators 4(1), (5), (6) (a) and (7)	$\checkmark$

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

PER	FORMANCE CRITERIA	REF	Ι	R
1.	identify and label defective appliance(s)		✓	$\checkmark$
2.	multiple chimney/flue defects that default to AR	GUISP	✓	✓
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			$\checkmark$
KNO	OWLEDGE & UNDERSTANDING			
1.	requirements for gas proving systems and interlocks			$\checkmark$
2.	requirements for automatic emergency control stop buttons/controls			$\checkmark$

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

PER	RFORMANCE CRITERIA	REF	I	R
1.	check operation of each gas safety control/device is to MIs and identify clearly		✓	$\checkmark$
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		✓	$\checkmark$
KN	OWLEDGE & 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)		✓	$\checkmark$

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

PER	ORMANCE 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.:		$\checkmark$	
(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	GIUSP Appendix 5	~	
KNO	WLEDGE & UNDERSTANDING			
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)		$\checkmark$	
(ii)	Reg. 26 Gas appliances – safety precautions 26 (1) to (10)		$\checkmark$	
(iii)	Reg. 26 Gas appliances 9 (ca)			<ul> <li>Image: A set of the set of the</li></ul>