Strategic Management Board

ACS.CCCN1 SAFETY ASSESSMENT CRITERIA INITIAL.NON-DOMESTIC NATURAL GAS CORE CATERING APPLIANCES

ACS. CCCN1 SAFETY ASSESSMENT CRITERIA RE-ASSESSMENT (OF CCCN1) NON-DOMESTIC. NATURAL GAS + COMCAT 1, 2, 3, 4, 5

CCCN1 INITIAL & RE-ASSESSMENT

Introduction

Tests gas safety competencies in core areas of gas work common to catering appliances.

This assessment covers dedicated catering establishments and also food technology areas in educational establishments.

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

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

Comprises:

- 3. Products and characteristics of combustion
- 4/12. Ventilation and flueing (make-up and extract)
- 5. Installation of pipework and fittings
- 16. Re-assessment of appliances

Pre-requisites

Initial

ND Core Generic Parts A and B.

Re-assessment

ND Core Generic Parts A & B + CCCN1 with, as appropriate, COMCAT 1/2/3/4/5.

Reference and normative documents

MIs.

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

- HSL56
- GIUSP
- BS 6173
- IGEM/UP/11 Edition 2
- BS7967-5
- IGEM/UP/19
- IGEM/IG/G2

ACS/SMB/003/ACRND identifies Normative Documents that should be held by ACs.

Abbreviations

AC. Assessment Centre CB. Certification Body FSD. Flame supervision device I. Initial MIs. Manufacturer's/manufacturers' instructions ND. Non-domestic R. Re-assessment Ref. Reference.

3. Products and characteristics of combustion

PER	FORMANCE CRITERIA	REF	Ι	R
1.	CO detectors and indicators			
(i)	identify detectors and indicators		\checkmark	\checkmark
(ii)	installation-locations		\checkmark	\checkmark
(iii)	commissioning and maintenance of detectors (audible, readable, visual)		\checkmark	\checkmark
KNO	WLEDGE & UNDERSTANDING	REF	I	R
1.	ambient levels of CO ₂		\checkmark	\checkmark
2.	critical levels of CO ₂ that could cause vitiation affecting combustion process		\checkmark	\checkmark
3.	types of portable combustion gas analysers		\checkmark	\checkmark
4.	use of combustion analysers on checking appliance combustion performance		\checkmark	\checkmark
5.	manufacturing Standards for electronic CO detectors		\checkmark	\checkmark

4/12. Ventilation and flueing (make-up and extract)

PER	ORMANCE CRITERIA	REF	Ι	R
1.	calculate free area of air vents and grilles		\checkmark	\checkmark
2.	recognise adequate and inadequate ventilation (make-up air and extract)		\checkmark	\checkmark
3.	recognise suitable/unsuitable overhead canopy extraction - air changes per hour		\checkmark	\checkmark
4.	carry out visual inspection of kitchen and assess performance of existing			
	catering installation:			
(i)	confirm interlock installation to UP19			
(ii)	confirm existing ventilation system (make-up and extract) operating correctly by		\checkmark	\checkmark
	carrying out an air quality test			<u> </u>
(iii)				
(iv)	set up and apply suitable systems of work and written procedures		\checkmark	\checkmark
(v)	identify correct and incorrect labels and notices		\checkmark	\checkmark
5.	calculate ventilation for combustion		\checkmark	\checkmark
6.	calculate ventilation (make-up air and extract) on multi-appliance installations		\checkmark	\checkmark
7.	calculate additional ventilation for hoods, canopies, extractor fans etc.		\checkmark	\checkmark
8.	check siting of ventilation (wall, window, floor, ceiling and ducted) direct to outside		\checkmark	\checkmark
	air; series air vents			
9.	identify restrictions to ventilation (make-up air) grille locations		\checkmark	\checkmark
10.	identify correctly and incorrectly installed Type A and B appliances		\checkmark	\checkmark
11.	identify types of ventilation (make -up air and extract) terminations, grilles and vents		\checkmark	\checkmark
12.	identify unsafe ventilation installations e.g. fly screens (pest control)		\checkmark	\checkmark
KNO	WLEDGE & UNDERSTANDING	REF	Ι	
1.	installing second hand appliances (FSD); upgrading gas controls or carrying out		\checkmark	\checkmark
	repairs on catering appliances not installed to BS 6173			
2.	installing complete new kitchen or mechanical ventilation system		\checkmark	\checkmark
3.	extract system requirements when installing both Type A and B appliances in existing		\checkmark	\checkmark
	installations			
4.	effects of cooking fumes on combustion		\checkmark	\checkmark
5.	appliances with forced draught burners		\checkmark	\checkmark
6.	adventitious air supplies		\checkmark	\checkmark
7.	reasons for adequate ventilation (make-up air and extract)		\checkmark	\checkmark
8.	access and maintenance for ventilation (extract) ductwork			\checkmark
9.	recognition of different ventilation (extract) systems (canopies, ventilated ceilings etc.)		\checkmark	\checkmark
10.	dealing with interlocks fitted with overrides		\checkmark	\checkmark
11.	recognition of when canopy performance tests are required		\checkmark	\checkmark
12.	identification and installation of in tumescent air vents		\checkmark	
13.	operation of passive stack ventilation		\checkmark	\checkmark
14.	ventilation for internal kitchens		\checkmark	\checkmark
15.	CO2 levels in atmosphere action levels for unsafe situations		\checkmark	

5. Installation of pipework and fittings

KNO	OWLEDGE & UNDERSTANDING	REF	Ι	R
1.	emergency isolation valves		\checkmark	
2.	automatic emergency isolation valves		\checkmark	
3.	isolation valves for appliances		\checkmark	
4.	pipe sizing to appliance requirements, inc. theoretical exercise		\checkmark	
5.	sleeving for pipework		\checkmark	
6.	types of hoses and flexible connections		\checkmark	
7.	appliance restraining cables		\checkmark	
8.	identification of defective installation pipework		\checkmark	

16. Re-assessment of appliances

			APPLIANCE TYPE				
PERFORMANCE CRITERIA:		COMCAT 1 & 3	COMCAT 2	COMCAT 4	COMCAT 5		
1.	check appliance is complete, fit and suitable for use	*	*	*	*		
2.	check gas supply to appliance has been installed		*				
	using appropriate materials and fittings, to	*		*	*		
	appropriate standards						
3.	check appliance is level and stable (lock casters, if applicable)	*	*	*	*		
4.	check flue system has been installed with appropriate materials and fittings to appropriate standards			*			
5.	check vents, grilles and ducts supplying ventilation to appliance are installed/positioned using appropriate materials and fittings to MIs	*	*	*	*		
6.	install appliance to MIs, current normative documents	*	*	*	*		
7.	commission appliance/equipment:						
(i)	purge appliance/equipment of air	*	*	*	*		
(ii)	fill appliance to MIs		*	*			
(iii)	light appliance to MIs	*	*	*	*		
(iv)	check OP and/or gas rate/heat input at appliance to MIs	*	*	*	*		
(v)	check flue/extract system safely removing products of combustion	*	*	*	*		
(vi)	check flue gas analysis readings are to MIs 1			*	*		
(vii)	check supply of combustion air is adequate	*	*	*	*		
(viii)	check flame picture, stability and ignition are correct	*	*	*	*		
(ix)	inspect and test appliance operational gas safety components e.g. burners, injectors, primary air ports, filters, heat exchanger and flue-ways, ignition devices, FSD, thermostats, interlocks, pressure	*	*	*	*		
	switches/thermostats, taps, regulators and any other gas safety components (where appropriate) for correct operation to MIs. <i>N.B. High limit and</i> <i>pressure stats may be assessed by K&U</i>						
(x)	check steam pressure controls are operating correctly		*				
(xi)	identify gas safety faults on components (specific to appliance)	*	*	*	*		
(xii)	check appliance is working correctly/safely as intended	*	*	*	*		
(xiii)	check users controls are operating correctly	*	*	*	*		
8.	explain safe operation of appliance/equipment	*	*	*	*		
	WLEDGE & UNDERSTANDING						
1.	installing second hand appliances with enclosed burners	*	*	*	*		
2.	upgrading safety controls on second hand appliances	*	*	*			
3.	minimum distance between gas pipes and building	*	*	*	*		