

ACS.HTR1 SAFETY ASSESSMENT CRITERIA INITIAL.DOMESTIC NATURAL GAS & LPG GAS FIRES AND WALL HEATERS

Issue 5 © ACS.SMB

HTR 1 INITIAL

Introduction

Tests gas safety competence to install, exchange, commission, disconnect, service, repair and break down domestic open, balanced fan assisted flued gas fires, wall heaters, convector heaters, stoves and flueless gas fires with and without catalytic converters.

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.

Appliance range

Open flue gas fire (radiant/convector), open flue ILFE fires, open flue DFE fires, convector heaters and stoves, balanced flue gas fires and balanced fan assisted wall heater and flueless gas fires with and without catalytic converters.

Pre-requisites

(CCN1 + CPA1) or CCN1 sat from 1st April 2012 or (CoCDN1 + CPA1) or CoCDN1 sat from 1st April 2012 (COCN1 + CPA1) for ND premises only or COCN1 sat from 1st April 2012 for ND premises only or (CCLP1 + CPA1) or CCLP1 sat from 1st April 2012 or (CoLPNG1 + CPA1) or QCF or S/NVQ.

Exclusions

Fire surrounds, hearths, construction work with masonry or bricks on chimneys, penetrating structures for flues and electricity.

References and normative documents

Appliance MIs.

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

- HSL56
- BS 5871-1, 2, 3 and 4
- BS 5440-1
- BS 7967-1, 2, 3 and 4
- GIUSP.

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

Abbreviations

AC. Assessment Centre

DFE. Decorative fuel effect

FSD. Flame supervision device

I. Initial

ILFE. Inset live fuel effect

MIs. Manufacturer's/manufacturers' instructions

OP. Operating pressure

Ref. Reference.

Issue 5 © ACS.SMB

PERF	ORMANCE CRITERIA	REF	Ι
1.	check fire place opening and hearth construction and dimensions conform to requirements		√
2.	check chimney/flue is complete throughout its length and is correctly terminated		V
3.	use smoke test to confirm that flue discharges correctly only to atmosphere		V
4.	check catchment area conforms to requirements		V
5.	check appliance is complete and fit for use and purpose		V
6.	isolate gas supply prior to work		V
7.	install flue spigot restrictor, if required		\ \ \
8.	seal fire to surround/wall (inset)		√
9.	fit closure plate and seal to fireplace opening (radiant convector)		V √
10.	connect appliance to gas supply and/or chimney		√ /
11.	re-establish gas supply		√
12.	check work carried out is gas tight		√
13.	ensure appliance is correctly located, level and stable		√ '
14.	position coal/log effect fuel correctly		√
15.	position radiant element correctly		
16.	dismantle and/or clean appliance operational gas safety components, using appropriate		
	cleaning methods and agents (e.g. burners, injectors, primary air ports, combustion		
	chambers, ignition devices, taps, FSDs and fuel effects where appropriate).		
17.	commission appliance:		
(i)	purge of air		
(ii)	check OP/gas rate at appliance		\vee
(iii)	check burners flame pictures, stability and ignition		√
(iv)	check user controls are operating correctly		√
(v)	check safety control devices, inc. oxygen depletion devices, are operating correctly to MIs		V
(vi)	carry out spillage test		V
(vii)	measure combustion performance on flueless gas fire to MIs or BS 7967-2		V
(viii)	interpret combustion performance test readings		V
	interpret combastion performance test readings		
18			
18.	identify defects on gas safety components		$\sqrt{}$
19.	identify defects on gas safety components explain safe operation and use of appliance	REF	
19.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING	REF	√ √ I
19. KNO	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions	REF	√ √ I √
19. KNO 1. 2.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults	REF	√ √ I
19. KNO 1. 2. 3.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations	REF	√ ✓ ✓ ✓ ✓
19. KNO 1. 2. 3. 4.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires	REF	\frac{\sqrt{1}}{\sqrt{1}}
19. KNO 1. 2. 3. 4. 5.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqrt{2}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires	REF	\frac{1}{\sqrt{1}}
19. KNO 1. 2. 3. 4. 5. 6. 7.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqrt{2}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires	REF	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a	REF	\frac{1}{\sqrt{1}} \frac{1}{\sqr
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit:	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit: direct flue connection fires when fitting kit to an unlined chimney	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit:	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. (i) (ii)	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit: direct flue connection fires when fitting kit to an unlined chimney	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. (i) (ii) (iii)	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit: direct flue connection fires when fitting kit to an unlined chimney min. flue/chimney dimensions	REF	V
19. KNO 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. (i) (ii) (iii)	identify defects on gas safety components explain safe operation and use of appliance WLEDGE & UNDERSTANDING identifying unsafe conditions diagnosing gas safety faults suitable and unsuitable appliance room/space locations ventilation location for DFEs and flueless gas fires minimum flue sizes for ILFEs installation of metal flue systems and flue boxes for gas fires direct flue connection appliances types and installation of heating stoves electrical gas safety control devices for fanned draught gas fires canopy requirements for decorative gas fires fire protection, inc. user and floors advice to user, inc. operation and maintenance fitting appliances in raised builders openings advice to user for fitting independent CO alarms effects of fitting a flueless gas fire into an opening under an existing flue; in front of a fireplace opening; close to an existing flue or close to an air vent commissioning flueless appliances maintenance and safety checks for flueless space heaters fitting a flue kit: direct flue connection fires when fitting kit to an unlined chimney min. flue/chimney dimensions calculating debris catchment void	REF	V

Issue 5 © ACS.SMB