



**ACS.ICAE1 LS  
SAFETY ASSESSMENT CRITERIA  
INITIAL AND RE-ASSESSMENT  
NON-DOMESTIC  
NATURAL GAS & LPG  
APPLIANCES/EQUIPMENT  
(FIRST FIX)**

**ICAE1 LS****INITIAL & RE-ASSESSMENT****Introduction**

Tests the gas safety competence of an operative in the work of placing, erecting and installing first fix non-domestic appliances/equipment without connection to a live gas supply.

Candidates will require ICPN1 LS for pipework connection of diameter > 35 mm (R1¼).

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**

All non-domestic appliances and equipment. Pipework diameter ≤ 35 mm (R1¼).

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

None.

**Re-assessment**

ICAE1 LS

**Exclusions**

Design applications for positioning or sizing of appliances/equipment, building work, electrical or plumbing work, the penetrating or making good of walls, roofs or ceilings, and application of pipework protection.

**References and normative documents**

MIs.

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

- HSL56
- GIUSP
- BS 5440 - 2
- BS 6230
- BS 6644
- BS 6891
- BS 7186
- IGEM/UP/10 Edition 4
- IGEM/UP/2 Edition 3
- UKLPG CoP 22.
- IGEM/UP/16 Communication 1756

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

**Abbreviations.**

AC. Assessment Centre

CB. Certification Body

I. Initial

MIs. Manufacturer's/manufacturers' instructions

R. Re-assessment

Ref. Reference.

PERFORMANCE CRITERIA	REF	I	R
1. join steel pipe using appropriate fittings, methods and agents		√	
2. join copper tube using appropriate capillary end fittings, methods and agents		√	
3. join copper tube using appropriate compression fittings, methods and agents		√	
4. use temporary continuity bond correctly		√	
5. identify gas supplies as being of adequate size		√	√
6. site appliances to MIs		√	√
7. check appliances are correctly assembled, complete and fit for use and purpose		√	√
8. select gas pipework, fittings and isolation valves for appliance connections		√	√
9. isolate gas and electrical supply prior to work		√	
10. fit isolation valves to pipework in identified positions		√	√
11. fit appliances' gas regulators, if applicable		√	√
12. use appropriate pipework and fittings to connect appliances to isolation valves		√	√
13. connect chimney/flue configuration between appliances and pre-installed chimney		√	√
14. identify defects on gas installation connections		√	√
<b>KNOWLEDGE &amp; UNDERSTANDING</b>			
1. mechanical ventilation for heating appliances	IGEM/UP 10 Ed4	√	√
2. natural ventilation for open flue heating appliances in boiler rooms and enclosures		√	√
3. flexible connections used with heating appliances		√	
4. ventilation for balanced compartments		√	√
5.			
6. clearances - proximity of combustible materials	IGEM/10 Ed4	√	
7. restrictions to temperatures in boiler houses for heating appliances		√	√
8. <b>HSL56:</b>			
(i) Reg. 26 Gas Appliances - Safety Precautions 26 (5)		√	
(ii) Reg. 33 Testing of Appliances 33 (3)		√	
9. safety interlocks between ventilation fans and gas appliances	IGEM/UP10 Ed4	√	√
10. room sealed heating appliances in enclosures		√	√
11. common chimney construction - suitable materials for large chimneys		√	√
12. insulation and condensation provision for heating appliance chimneys		√	√
13. chimney construction for heating appliance Type B flues		√	√
14. terminal types and positions for open/natural draught flues		√	√
15. positioning of room sealed Type C appliance terminals		√	√
16. safety for balanced compartments		√	√
17. fan diluted flues		√	√
18. Awareness of Hazardous Area Classification		√	√