

ACS.CIGA1 SAFETY ASSESSMENT CRITERIA INITIAL NON-DOMESTIC NATURAL GAS & LPG INDIRECT GAS-FIRED HEATING APPLIANCES & EQUIPMENT

CIGA1 INITIAL

Introduction

Tests the gas safety competence of an operative in the work of install, commission, service, repair and break down of indirect gas fired heating appliances and equipment.

This assessment does not include tightness testing and purging (see TPCP1A and TPCP1).

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

Non-domestic gas fired forced convection air heaters and gas fired hot water boilers of rated heat input between 70kW and 2 MW.

Includes internally installed gas fired absorption heat pumps, work on external units covered by COCN1.

Pre-requisites

COCN1 or CCN1 + CoDNCO1 or CCLP1 + CoDNCO1 or QCF or S/NVQ + ICPN1 if pipework diameter > 50 mm.

Exclusions

Electrical or building, use of any mechanical lifting aids to position appliance, design of system requirements, installation and commissioning of hot water/heating systems, installation and design of any ductwork for hot air transmission or ventilation and penetration of any structures for flueing, pipework etc.

References and normative documents

MIs.

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

- HSL56
- GIUSP
- BS 6230
- BS 6644
- BS 5440
- BS 7967-5
- IGEM/UP/10 Edition 4

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
R. Re-assessment
Ref. Reference

| PERF | ORMANCE CRITERIA | REF | I |
|--------|--|-----|----------|
| 1. | check gas supplies are of adequate size | | ✓ |
| 2. | check site appliances are sited to MIs | | ✓ |
| 3. | check appliance assemblies are complete and fit for use and purpose | | ✓ |
| 4. | check gas pipework, fittings and isolation valve for appliance connections conform | | ✓ |
| 5. | isolate gas and electrical supplies prior to work | | ✓ |
| 6. | connect flue assembly between appliance and pre-installed flue | | ✓ |
| 7. | re-establish gas and electrical supplies | | ✓ |
| 8. | check work carried out is gas tight | | ✓ |
| 9. | dismantle and clean appliances' operational gas safety components, using appropriate cleaning methods and agents e.g. isolation valves, gas regulators, FSDs, combustion chambers, high limit thermostats, solenoids and fan flow switches | | √ |
| 10. | commission appliance: | | |
| (i) | purge appliance of air | | ✓ |
| (ii) | check OP at appliances to MIs (adjust regulator if required) | | ✓ |
| (iii) | check burner flame pictures, stability, ignition are to MIs (combustion ratio for forced draught burner) | | √ |
| (iv) | check ventilation for both appliances is to MIs | | ✓ |
| (v) | check flue system is correctly clearing products of combustion | | ✓ |
| (vi) | check air heater heat exchanger is not leaking | | ✓ |
| (vii) | check safety control devices are operating correctly | | ✓ |
| (viii) | check user controls are operating correctly | | ✓ |
| (ix) | check thermostats are operating correctly, inc. high limit and fan thermostats | | ✓ |
| 11. | identify defects on gas safety components | | ✓ |
| 12. | explain safe operation and use of appliances | | ✓ |
| KNO | WLEDGE & UNDERSTANDING | | |
| 1. | ventilation | | ✓ |
| 2. | flueing | | ✓ |
| 3. | | | |
| 4. | operation of mechanical and electrical system and gas safety control devices | | ✓ |
| 5. | clearances - proximity of combustible materials | | ✓ |
| 6. | diagnosis of gas safety faults | | ✓ |