



**ACS.CoNGLP1 LAV
SAFETY ASSESSMENT CRITERIA
INITIAL & RE-ASSESSMENT
DOMESTIC
NATURAL GAS TO LPG
LEISURE ACCOMODATION VEHICLES**

CoNGLP1 LAV**INITIAL & RE- ASSESSMENT****Introduction**

Comprises:

- 3(b). LPG supply pressures. Operation and positioning of emergency isolation, flow control and valves
- 3(c) LPG cylinder and vessel location, safety and sizing
- 4. Ventilation (for appliances)
- 5. Installation of pipework and fittings post-delivery (and inspection of fuel cells and power generators).
- 12. Chimney standards
- 13. Chimney inspection and testing.

CoNGLP1 LAV can only be awarded when the Candidate holds CoNGLP1.

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 LPG fittings in LAVs.

Exclusions

Refillable tank installation

Pre-requisites***Initial***

CoNGLP1.

Re-assessment

CoNGLP1 + CoNGLP1 LAV.

References and normative documents

MIs.

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

- HSL56
- GIUSP
- LGUK CoP32
- BS EN 1949:2021
- BS 721

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

MP. Medium pressure

R. Re-assessment

Ref. Reference

UPSO. Under pressure safety cut-off

3(b). LPG supply pressures, Operation and positioning of emergency isolation, flow controls and valves

KNOWLEDGE AND UNDERSTANDING	REF	I	R
1. recognition of supply pressures from gas storage vessels: MP stage		✓	✓
2. operation and positioning of first and second stage regulators		✓	✓
3.			
4. protection against overpressure in road vehicles and holiday homes		✓	✓
5. pressure regulators and working pressure requirements <ul style="list-style-type: none"> • holiday homes • road going vehicles 		✓	✓
6. identification of causes of under-pressure conditions		✓	
7. operation, positioning and visible indicators of UPSOs		✓	
8. range & re-setting UPSOs		✓	
9. operation and positioning of limited relief valve		✓	
10. advice to the consumer on re-setting UPSO		✓	
11. operation and positioning of vapour service shut-off valve		✓	
12. Protection against accidental disconnection of supply		✓	✓
13. Max capacity / flow rate/ labels for LPG found in road vehicles		✓	✓
14. Max capacity / flow rate / labels for LPG found in caravan holiday homes		✓	✓

3(c). LPG cylinder and vessel location and safety

KNOWLEDGE AND UNDERSTANDING	REF	I	R
1. cylinders:			
Different installation methods, location and protection of Propane and Butane cylinders for use in : <ul style="list-style-type: none"> • road vehicles • holiday homes 		✓	✓
(i) General construction for compartments, lockers and internal housings for road vehicles and holiday homes		✓	✓
(ii) safety precautions for storage and use of cylinders including shut off valves		✓	✓
(iv) Shielding requirements for cylinder compartments		✓	✓
(v) restrictions & requirements when using two LPG supplies		✓	✓
(vi) ventilation safety precautions for storage of cylinders		✓	✓
2. vessels :			
(i) installation		✓	✓
(ii) marking of common vessels commercially available for single supply		✓	✓
(iii) location and safety of vessels		✓	✓
3. restrictions for electrical equipment in cylinder compartments			
(i) a/ only ELV equipment and cables not connecting within compartment allowed		✓	✓
(ii) not a precautions / potential source of ignition, exhaust systems etc.		✓	✓
(iii) protection against mechanical damage		✓	✓
4. requirements when using two LPG supplies (including labelling)		✓	✓
5. Periodical Visual inspection of fixed gas storage tank (non-propulsion)		✓	✓
6. OPSO, protection against overpressure found installed in: <ul style="list-style-type: none"> • road vehicles • holiday homes 		✓	✓
7. Awareness of LPG refillable tanks, or cylinders using filling points and accessories for road vehicles		✓	✓
8. LPG Regulators and Safety devices found in : <ul style="list-style-type: none"> • road vehicles • holiday homes 		✓	✓
9. Relief valve vent pipe positioning		✓	✓
10. Inspection and Maintenance		✓	✓
11. Consumer Guidance for Regulators		✓	✓

4. Ventilation (for appliances)

KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	siting of ventilation (wall, window, floor, ceiling and ducted) direct to outside air, or via series air vents		✓	
2.	criteria removed		✗	✗
3.	Habitable compartments, minimum Safety ventilation exercise for fixed ventilation openings non room sealed appliances for caravans and motor caravans.		✓	✓
(i)	Habitable compartments, minimum Safety ventilation exercise for fixed Ventilation openings for non-room sealed appliances for Caravan holiday homes		✓	✓
4.	ventilation for enclosed spaces - cupboards, compartments for open, balanced and fan assisted flued appliances (PC for Re-assessment)		✓	✓
(i)	prohibited zones for discharge openings for the products of combustion in relation to ventilators		✓	✓
5.	Habitable compartments > 10m ²		✓	✓
(i)	Alternative safety ventilation arrangements for Caravan Holiday Homes Habitable compartments > 20m ² floor area, including the use of trickle ventilators		✓	✓
6.	flueless appliances		✓	
7.	criteria removed			
8.	positioning of trunked ventilation into a space containing a gas appliance(s)		✓	
9.	High level safety ventilation if not supplied via a roof vent.		✓	✓
10.	gas dispersal drains (drop holes)		✓	✓
11.	additional ventilation requirements e.g., extractor fans, cooker hoods, dryers etc to include labels, and where a cooking warning notice is required		✓	✓

5. Installation of pipework and fittings post-delivery

(and inspection of fuel cells and power generators). **Range of pipe sizes: 6 mm to 35mm**

PERFORMANCE CRITERIA		REF	I	R
1.	join different pipe materials and hoses using appropriate compression/ mechanical fittings, methods, and agents suitable for : <ul style="list-style-type: none"> • Holiday home Installation • To road going LAV 		✓	✓
2.	check work carried out is gas tight and purged		✓	✓
KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	copper pipe and fittings – suitability and use (hard soldering)		✓	✓
2.	locations where LPG pipework is not to be installed		✓	
3.	installing fuel cells		✓	✓
4.	Inspection of installed LPG power generators			
(i)	sealing and ventilating and fire protecting generator compartment		✓	✓
(ii)	accessibility of controls		✓	✓
5.	types and use of flexible pipework, tube, hose, nozzles and assemblies for		✓	✓

	road vehicles and holiday homes			
6.	use of Pressed fit fittings in holiday homes		✓	✓
7.	use and restrictions to the use of corrugated stainless-steel pliable tube in Holiday homes and road vehicles		✓	✓
8.	marking of the working pressure		✓	✓
9.	pipe supports in Holiday homes and road vehicles		✓	✓
10.	use of gas escape detective devices		✓	✓
11.	general selection of appliance suitability & connection methods		✓	✓
12.	Appliance shut off valve and labelling requirements		✓	✓
13.	use of appliance slide out and valves in road vehicles		✓	✓
14.	Quick release self-sealing couplings		✓	✓
15.	use of safety closing devices in road going vehicles		✓	✓

12. Chimney Standards (for appliances)

KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	flue systems:			
a/	restrictions to the installation of space heaters and water heaters in road vehicles		✓	✓
b/	water heaters in holiday homes		✓	✓
(i)	Flue system Installation's requirements		✓	
(ii)	Additional expectations for flexible flue systems.		✓	
(iii)	Flue shielding and routing requirements.		✓	✓
(iv)	general advice and restrictions to the installation of non-room sealed appliances found in road vehicles and holiday homes		✓	✓
2.	closed flue systems: natural draught: specific flue heights and termination positions for closed flues		✓	✓
3.	balanced & fanned flue appliances:			
(i)	restrictions for flue termination positions		✓	
4.	Underfloor discharge arrangements		✓	✓
5.	Additional restrictions for flue terminations >30 g/h LPG in relation to Ventilators.		✓	✓
6.	Automatic shut off devices for flue terminations >30 g/h LPG in relation to windows		✓	✓
7.	flue terminations in relation to windows		✓	✓
8.	flue terminations in relation to refuelling system, breather tank, ventilators e.t.c		✓	✓

13. Flue inspection and testing

PERFORMANCE CRITERIA		REF	I	R
1.	inspect flue visually to Liquid Gas UK COP21: identify closed flue defects		✓	✓
2.	carry out closed flue spillage test		✓	✓
3.	Inspection and accessibility of flues		✓	✓