Strategic Management Board

ACS.CCLP1 B
SAFETY ASSESSMENT CRITERIA
INITIAL & RE-ASSESSMENT
DOMESTIC LPG
BOATS

CCLP1 B	INITIAL & RE-ASSESSMENT

Introduction

Tests gas safety competence in core domestic LPG for boats.

CCLP1 B can only be awarded when the Candidate holds CCLP1.

Comprises:

3(c). LPG vessel and cylinder location, safety and sizing
4. Ventilation
5. Installation of pipework and fittings
12. Chimney Standards
13. Chimney inspection and testing
15. Re-establish existing LPG supply and relight appliances.

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.

Range

All LPG fittings on boats.

Pre-requisites

Initial

CCLP1.

Re-assessment

CCLP1 + CCLP1 B.

References and normative documents

MIs.

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

- PD 5482 – 3: 2005
- BS EN ISO 10239: 2014
- HSL56
- GIUSP.

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

Abbreviations

AC. Assessment Centre
CB. Certification Body
B. Boats
I. Initial
MIs. Manufacturer's/manufacturers' instructions
R. Re-assessment
Ref. Reference.

Issue 4 © ACS.SMB

3(e b). Cylinder location and safety

KNOWLEDGE AND UNDERSTANDING		REF	I	R
1.	**location and safety of cylinders:**			
(i)	installation, location and protection for Propane and Butane cylinders		√	
(ii)	construction (inc. ventilation) of compartments, lockers and internal housings		√	
(iii)	safety precautions for storage and use of cylinders		√	
2	Requirements for installation of means to test the LPG system for leakage (e.g. bubble leak tester/pressure gauge)	BS EN ISO 10239 4.5	√	√

3(c). Supply pressures - operation and positioning of emergency isolation, flow control and valves for cylinders

KNOWLEDGE AND UNDERSTANDING		REF	I	R
1	Operation and positioning of pressure regulation devices for cylinders	BS EN ISO 10239 5.6	√	√
2	Over pressure protection	BS EN ISO 10239 5.2	√	√

4. Ventilation

PERFORMANCE CRITERIA		REF	I	R
1.	calculate free area of selection of air vents		√	√
2.	identify correct and incorrect types of air vents and grilles e.g. fly screens		√	√
3.	identify inadequate ventilation		√	√
KNOWLEDGE AND UNDERSTANDING (these criteria are PC for re-assessment)		**REF**	**I**	**R**
1.	siting of ventilation (hull, windows, decks and ducted) direct to outside air, or via series air vents		√	√
2.	ventilation requirements		√	√
3.	installing ventilation grilles and vents		√	
4.	types of grilles and vents		√	
5.	additional ventilation e.g. extractor fans, cooker hoods, dryers etc.		√	
6.	labels and notices		√	√
7.	calculating ventilation for combustion air (BS 5482-3)		√	√
8.	calculating ventilation for combustion air (BS EN ISO 10239)		√	√
9.	calculating ventilation for cupboards and compartments for open, balanced and fan assisted flue appliances		√	√
10.	calculating ventilation for combustion air for multi-appliance installations		√	√
11.	flueless appliances		√	
12.	positioning of trunked ventilation into a space containing a gas appliance(s)		√	
13.	location and ventilation for gas cylinder housings		√	√
14.	protection for low level appliances		√	√

5. Installation of pipework and fittings. Range of pipe sizes: 4mm to 22mm ~~6 mm to 28 mm~~

PERFORMANCE CRITERIA	REF	I	R
1. join soft copper pipe with appropriate compression fittings, methods and agents	BS EN ISO 10239 6.2.4	√	
KNOWLEDGE AND UNDERSTANDING	**REF**	**I**	**R**
1. copper pipe and fittings, standards, suitability and use - hard soldering	BS EN ISO 10239 6.4.1	√	√
1a Wall thickness requirements for solid drawn copper/stainless steel pipework	BS EN ISO 10239 6.2.1	√	√
2. ~~galvanised steel pipe~~ pliable corrugated stainless steel tubing (PCT) and fittings, standards, suitability and use		√	√
3. jointing ~~and cleaning agents for~~ copper and stainless ~~and galvanised~~ steel pipework	BS EN ISO 10239 6.2.4	√	√
4. restrictions on use of union, compression and capillary fittings	BS EN ISO 10239 6.2.5 6.2.6 6.4.2	√	√
5. sleeve pipework through bulkheads		√	
6. pipework passing through engine compartments		√	
7. precautions and protection when installing pipework		√	√
8 requirements for pipework when in direct contact with metallic parts of the craft structure	BS EN ISO 10239 6.5.1	√	√

12. Flueing Standards for appliances

KNOWLEDGE AND UNDERSTANDING	REF	I	R
1. **open gas flue systems: natural draught:**			
(i) ~~flue requirements, termination positions for open flues (BS 5482-3 and appropriate MIs pre-Nov 2000)~~		~~√~~	~~√~~
(ii) flue requirements, termination positions for open flues (after Nov 00 ~~BS EN ISO 10239, IGE/UP/8~~ PD 5482-3 and MIs)		√	√
(iii) flueing appliances installed in boats (after May 1999)		√	
(iv) specific flue heights and termination positions for open and closed flues		√	
(v) risk assessments when replacing existing open flue water heaters		√	√
2. **room sealed: natural draught:**			
(i) room sealed flue construction		√	√
(ii) restrictions for room sealed termination positions (~~BS 5482-3~~ PD 5482-3 and BS EN ISO 10239)	BS EN ISO 10239 13.6	√	√
(iii) requirements and restrictions for room sealed appliances (BS EN ISO 10239 2000 - IGE/G/6 and MIs)		√	√
(iv) room sealed flue terminal guards		√	√

13. Flue testing

KNOWLEDGE AND UNDERSTANDING	REF	I	R
1. open flue testing procedures		√	
2. procedures if flue shows signs of spillage		√	

15. Re-establish existing gas supply and relight appliances

PERFORMANCE CRITERIA	REF	I	R
1. check appliances are designed for a marine environment, CE marked and are of correct type		√	
KNOWLEDGE AND UNDERSTANDING	**REF**	**I**	**R**
1. adjacent structures in contact with any gas appliance		√	√
2. combustible materials adjacent to appliances that may be subject to a temperature rise of 50 ºC		√	√
3. min. distances for cooking appliances from Class1 combustible surfaces		√	√
4. information for users		√	√
5. cooking appliance restrictions when used with integral LPG cartridges	BS EN ISO 10239 Annex D	√	√

Issue 4 © ACS.SMB