Strategic Management Board

ACS. ICPN1
SAFETY ASSESSMENT CRITERIA
INITIAL AND RE-ASSESSMENT
NON-DOMESTIC
NATURAL GAS &LPG
PIPEWORK & FITTINGS

ICPN1	INITIAL & RE-ASSESSMENT

Introduction

Tests gas safety competence in first fixing of non-domestic installation pipework including the installation of check meters.

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

Work on non-domestic Installation pipework up to a maximum operating pressure of 16 bar.

Steel, CSST, copper pipework and PE transitional fittings of diameter in accordance to the relevant Standard.

Electro-fusion jointing of PE pipework is covered in EFJLP1.

Pre-requisites

Initial

Any of COCN1; CCCN1; COCNPI1 LS; CCLNG1 or
any of CCN1; CCLP1; CESP1; CMA1 or
QCF or S/NVQ alternative.

Re-assessment

ICPN1.

Exclusions

Competence for work above 16 bar including additional clauses included in edition 3 of the standard e.g. 'hot tapping' must be covered by a suitable Training and Assessment programme delivered via a Certification Body.

Penetrating or making good of walls floors or ceilings, application of pipework protection, work on gas service pipes, welding of steel joints, butt or electro-fusion of PE joints, installation of main equipotential earth bonding, digging or back filling of trenches.

Aspects of connection of pipework to a gas supply, introduction of any gas to the pipework, tightness testing or commissioning of pipework, appliances or equipment are covered by other Gas Safety Assessments. Installation of, and associated work on, boosters is covered by BMP1.

The installation of Primary or Secondary meters used for billing purposes and covered by specific Metering elements i.e. MET1, MET4, CMET1 etc.

Normative and reference documents

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

- HSL56
- IGEM/G/1
- IGEM/UP/2 Edition 3
- BS 1710
- UKLPG CoP22
- IGEM/GM /6
- GIUSP.

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

Abbreviations

AC. Assessment Centre
CB. Certification Body
CSST. Corrugated stainless steel tube
I. Initial
R. Re-assessment
Ref. Reference.

PERFORMANCE CRITERIA	REF	I	R
1. join CSST		✓	✓
2.			
3. join steel pipe using taper threaded appropriate fittings, jointing compounds, anaerobic sealants and tapes		✓	
4. join steel pipe using flanges and appropriate jointing material		✓	
5. join steel pipe using semi rigid compression couplings, methods and agents		✓	
6. join copper pipe using capillary end feed fitting, method and agents		✓	
7. connect PE pipe to steel pipe using appropriate transitional fittings, methods and agents		✓	
8. connect thermal expansion bellows between two pieces of steel pipework, supported with restraining and alignment ties		✓	
9. join stainless steel pipe/copper pipe with appropriate pressed joints and tools		✓	✓
10. check jointing work carried out is gas tight (method at AC discretion)		✓	✓
11. install bonding strap or permanent continuity bond correctly across an appropriate flange/adaptor or semi rigid coupling		✓	
12. select correct isolation valves to MIs and for application		✓	
13. inspect pre-installed pipework and identify correct/incorrect jointing			✓
KNOWLEDGE & UNDERSTANDING	**REF**	**I**	**R**
0a acronyms and abbreviations contained within IGEM/UP/2		✓	✓
0b requirements and sizing for pressure test and purge points		✓	✓
1. steel pipe and fittings; in particular flange categories		✓	
2. limitations on nominal bores for jointing steel pipework		✓	✓
3. limitations on use of CSST		✓	✓
3a checking synthetic cover of CSST for damage in accordance with MIs		✓	✓
3b bending CSST within limitations of bend radii in accordance with MIs		✓	✓
3c brazing copper capillary fittings		✓	✓
3d limitations of compression coupling joints copper pipework		✓	✓
4. flexible and semi-rigid connections		✓	
5. jointing and cleaning agents for steel, copper and PE pipework		✓	✓
6. pipe supports, clips and fixings for steel, copper and PE		✓	
7. types and selection of manual isolation valves		✓	
8. positioning of manual isolation valves		✓	
9. pipe sizing to maximum gas flow rate requirements – inc. theoretical exercise		✓	✓
10. thermal expansion of long lengths of pipework		✓	
11. copper pipe and fittings		✓	
12. colour coding, banding and labelling (direction) of pipework		✓	✓
13. preparation of pipework installation drawings and use of correct legends		✓	
14. main protective bonding conductor, main equipotential bonding		✓	✓
14a. entry and exit of pipework from buildings; types of entry; sleeving and sealing		✓	
15. ventilation for pipework in building service ducts, suspended ceiling/floors		✓	
15a. types of vents and breathers required		✓	✓
16. buried pipework related to depth of cover and distance from buildings		✓	
16a. pipework in multi-storey/multiple dwellings		✓	
17. installation of automatic isolation valves		✓	
18. requirement, speed of operation and types of automatic isolation valve		✓	

19	HSL56. Reg. 24 Large consumers (1) to (3) inclusive		✓	✓
(i)	HSL 56: meter location which do not satisfy GSIUR		✓	✓
(ii)	Regulation 12 Meters –general provisions 12 (1) –(6)		✓	✓
(iii)	Regulation 13 Meter housings		✓	✓
(iv)	Installation of check meters into pipework runs		✓	✓
(v)	unsafe meter installations		✓	✓
20.	location and limitations on use of pressed joints with stainless steel or copper pipework		✓	
21.	PE pipe and fittings		✓	
22.	effects of vibration from appliances and equipment		✓	
23.	Awareness of Hazardous Area Classification		✓	✓
24	safety notices and labels		✓	✓