

Matrix of LEV knowledge guidance for key roles:

LEV Commissioning Engineer

Last modified 21-5-2018

Topic	Knowledge Requirements:	Employer-related personnel	BOHS Qualifications (or equivalent)	
			PGQ2: Basic design principles of LEV systems inc. report submission	PGQ4: Performance evaluation and management of LEV systems inc. report submission
		LEV Commissioning Engineer		
	<b>ESSENTIAL LEARNING</b>	<b>N</b>	<b>M</b>	<b>N*</b>
	<b>DESIRABLE LEARNING</b>	<b>M</b>		
Preparation of LEV specification & quotation	Properties of airborne contaminants: principles	3	*	**
	Recognition of hazards from process materials	3	*	**
	Recognition of hazardous substances generated by the process	3		**
	Understanding of the nature of sources of airborne contaminants in the process	3		**
	Understanding of process requirements	3		
	Understanding of statutory requirements for control	3	*	*
Design of LEV system	Selection of a control benchmark	3		
	Selection of a control requirement	3		
	Components of LEV systems	3	*	*
	Characteristics of different hood types	3	*	*
	Principles of LEV hood design	3	*	*
	Selection of appropriate hoods for the application	3		
	Principles of good ductwork design	3	*	*
	Need for system monitors & alarms	3		*
	Characteristics of fans/air movers	3	*	*
	Characteristics of air cleaners/filters	3	*	*
	Air discharge and filtrate removal arrangements	3	*	*
	DSEAR/ATEX Requirement inc explosion relief	3	*	**
	Recirculation of filtered air	3	*	*
	Provision of makeup air/ impact on general workroom ventilation	3	*	*
	Impact on workroom and external environment	3	*	*
	Ergonomic and safety considerations	3	*	*
Arrangements for maintenance, cleaning, inspection and test	3	*	*	
Installation & commissioning of LEV system	Installation of hardware: mechanical	2		
	Installation of hardware: electrical	2		
	Balancing of system	3	*	**
	Technical performance testing	3	*	**
	Qualitative assessment of control effectiveness	3	*	**
	Quantitative assessment of control effectiveness	3	*	**
	Commissioning report	3		**
	Provision of System manual	3		**
	Provision of System logbook	2		**
	End User Training	3		**
Thorough examination & test of LEV system	Thorough examination and test report	2	**	**
Changes & modifications	Modifications & changes	3		**
	Re-commissioning	3		**
	User training	3		**
LEV Professional	Guide to typical relevant experience (in years) to include: • Portfolio • Interview • References	3		

**Notes:**  
 1: Evidence or other experience e.g. UKAS, ILLVE, BUHS  
 2: From January 2018, BUHS PBU1 is a pre-requisite to PGQ4

**Key:**  
 1: Basic knowledge  
 2: Good knowledge of topic  
 3: Detailed knowledge of topic

**BOHS Qualifications Key:**  
 \* Basic information on topic  
 \*\* Detailed information on topic