

## Unit FM4.17: Understanding property, fabric and building services maintenance for facilities managers

*The assessment criteria form part of the unit and specify the standard that a learner is expected to meet to demonstrate that the learning outcomes within the unit have been achieved. The additional guidance, which is shown in brackets and italics alongside the assessment criteria, does not technically form part of the unit, in that it is not included in the reference version of the unit shown by the Register of Regulated Qualifications. The additional guidance is provided to illustrate how the assessment criteria might be interpreted. The BIFM will generally expect assessors to interpret the assessment criteria as described, or to an equivalent level of demand.*

### Aim of the unit:

This unit enables learners to develop their understanding of the range of strategies used in the delivery of effective property and building services maintenance in a variety of Facility Management contexts and the scope of management systems and technologies available.

Title:	Understanding property, fabric and building services maintenance for facilities managers	
Level:	4	
Credit value:	8	
Learning outcomes	Assessment criteria	
<i>A learner when awarded credit for this unit will:</i>	<i>Assessment of this learning outcome will require a learner to demonstrate that they can:</i>	
1. Understand building design	<p>1.1 Explain the range of building types and their uses <i>(supporting the explanation with examples (e.g. commercial, educational, industrial) rather than trying to provide an exhaustive list)</i></p> <p>1.2 Explain how particular building types may be used to best advantage <i>(supporting the explanation with examples of different types suited to different requirements, such as requirements relating to location, use of space, climate, environment, etc.)</i></p> <p>1.3 Explain the advantages and disadvantages of different building structures <i>(relating performance</i></p>	

	<p><i>characteristics (e.g. structural strength, resistance to weather) to different types of structure (e.g. load bearing masonry, timber frame and steel frame constructions, cladding systems)</i></p>
<p>2. Understand the maintenance implications of building, fabric, structures and components</p>	<p>2.1 Explain the fabric maintenance implications of differing building structures and components <i>(including load bearing masonry, timber frame and steel frame constructions, cladding systems and the use of steel, brick, concrete, wood, glass)</i></p> <p>2.2. Explain the benefits and drawbacks of the various structures and components used in old and new buildings <i>(including the relative cost and complexity of maintenance, environmental performance and presence of hazardous materials, e.g. asbestos)</i></p>
<p>3. Understand how a strategy for the maintenance of the building fabric can be implemented</p>	<p>3.1 Describe the range of maintenance strategies that can keep buildings safe, useable and help to retain value <i>(including periodic, reactive and preventative maintenance, and conditioned-based and risk-based maintenance)</i></p> <p>3.2 Explain the advantages and disadvantages of various ways of delivering fabric maintenance services <i>(supporting the explanation with example/s from the learner's own experience and/or case studies, and including comparison of in-house versus outsourced resource models)</i></p> <p>3.3 Explain how to implement and monitor a building fabric maintenance programme <i>(including condition surveys and forward maintenance plans)</i></p>

	<p>3.4 Explain with examples when it may be necessary to involve other specialists <i>(using example/s from the learner's own experience and/or case studies)</i></p>
<p>4. Understand the elements of building services maintenance programmes</p>	<p>4.1 Explain the range of building services which could be incorporated into differing types of building structures <i>(including utilities (electricity, gas, water), sewage, heating and ventilation, communications (telephone and data))</i></p> <p>4.2 Describe the constituent parts of a building services maintenance programme <i>(including analysis of risk, maintenance plan, tracking process, safe systems of work, record keeping, compliance, monitoring and reporting processes for mechanical, electrical, HVAC and lift maintenance)</i></p> <p>4.3 Explain the factors to be considered in developing a building services programme <i>(supporting the explanation with example/s from the learner's own experience or case studies that illustrate challenges from requirements and for implementation)</i></p> <p>4.4 Explain the advantages and disadvantages of various ways of delivering buildings services maintenance <i>(including reactive and planned/preventative maintenance and in-house versus outsourced service delivery)</i></p> <p>4.5 Explain how to implement and monitor a building services maintenance programme <i>(including condition surveys and forward maintenance plans)</i></p>
<p>5. Understand how to manage staff, contractors and specialists</p>	<p>5.1 Explain how to manage staff, contractors and specialists to ensure the required level of service is delivered <i>(providing an</i></p>

	<i>overview of appropriate management techniques)</i>	
6. Understand building management systems (BMS) and technology used to control or manage building services	<p>6.1 Explain the scope and use of buildings management systems (<i>from basic systems of data capture to integrated systems that allow remote monitoring, diagnosis and service engineer call-out</i>)</p> <p>6.2 Explain what other technologies can be used in controlling or managing building services (<i>supporting the explanation with examples, such as access control, time management systems, CCTV, equipment performance monitors, energy consumption monitors</i>).</p> <p>6.3 Explain how BMS can be used to help deliver sustainability in facilities management (<i>no additional guidance</i>)</p>	
Unit expiry date	31st December 2020	
Unit reference number	Y/601/1728	
Link to National Occupational Standards	FM417	
FM Professional Standards reference	FM functional area:	FM functional area component:
	Property Portfolio Management	Property and Asset Management

## **Resources:**

Building Maintenance Management by Barrie Chanter and Peter Swallow  
Workplace Strategies and Facilities Management: Building in Value (Building Value) by Rick Best, Gerard de Valence, and Craig Langston  
Building Maintenance Management by Barrie Chanter and Peter Swallow  
Lee's Building Maintenance Management by Paul Wordsworth  
Building Repair and Maintenance Management by Gahlot/Sharma  
Building Maintenance by Brian Wood  
Effective Building Maintenance: Protection of Capital Assets by Herb Stanford  
Building Care by Brian Wood  
CIBSE Guide M: Maintenance Engineering and Management by cibse  
Manager's Guide to Preventive Building Maintenance by Ryan Cruzan  
FM World - [www.fm-world.co.uk](http://www.fm-world.co.uk)  
[www.bifm.org.uk](http://www.bifm.org.uk)  
Facilities Management Journal - <http://www.fmj.co.uk/>