

# **MPBA Electrical Courses Overview**

Level One: Pre-delivery Electrical Condition Inspection, Testing and Reporting Level Two: In Service Electrical Repair, Modification and Maintenance Renewal Course



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Modular and Portable Building Association, C12 Generator Hall, Electric Wharf, Coventry, CV1 4JL

## **MPBA Electrical Courses Overview**



The MPBA Learning Hub, with input from member's and the ECA, have redeveloped the electrical qualifications to offer a more flexible solution for member companies.

The qualifications are primarily aimed at those individuals requiring registration under the MPBA Electrical Card Scheme only. Basic Health & Safety training is required for the qualifications along with an understanding of basic hand tools and access equipment.

Anyone without existing knowledge, as detailed above, must undertake the training addressing those requirements before attempting this qualification.

#### The aims of the qualifications are to:

- meet the needs of MPBA registration and those individuals who work for MPBA member companies.
- ensure the individual has sufficient knowledge to complete the safe inspection and maintenance of electrical installations in modular and portable buildings.
- ensure the individual has sufficient knowledge to undertake in-service electrical repairs, modification and maintenance.
- provide CSCS recognition for individuals working on sites to carry out Electrical Works (Level Two).

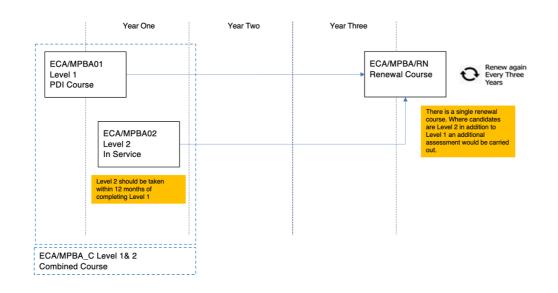
Each course covers different aspects of working on electrical systems in relation to modular and portable buildings. Qualified learners are deemed as having sufficient skills and knowledge to undertake different aspects of work depending on the course and assessment undertaken.

The availability of courses and use of the agreed working approach with the Electrical Card Scheme is only available for employees of MPBA member companies.

# **MPBA Electrical Courses Overview**

## Course Route Map

The following diagram shows the route for the candidates who wish to undertake testing only (Level one) or wish to progress to carry out in service modifications, repairs and circuit additions (Level two).



For both Level one and Level Two qualified individual renewals must take place within three years of completing the Level One Health and Safety (H&S) assessment, the Level Two course <u>does not</u> repeat the H&S assessment, there is a single renewal course.



#### Course Details

ECA/MPBA01 Modular & Portable Building Pre-delivery Electrical Condition Inspection, Testing and Reporting

The aim of this three-day course is to provide the underpinning knowledge and practical skills to enable MPBA member company employees to undertake the pre-delivery inspection, testing and reporting of a portable building single module electrical installation prior to delivery to a site.

#### Objectives

Given the underpinning knowledge, practical competencies, tools, test equipment and documentation at the end of the course candidates will be able to:

- Visually inspect a range of cabin electrical installations for common visual defects and carry out minor repair and replacement of electrical installation components.
- Carry out safe isolation of a cabin.
- Carry out the appropriate electrical tests, complete and sign off the electrical pre-delivery inspection report form.

## **Course Content**

- 1. ECS required Health and Safety
- 2. Basic Electrical Theory
- 3. Understanding Electrical Components
- 4. Understanding Installation Methods
- 5. Electrical Testing Approach
- 6. Practical Testing Demonstration

#### **Course Assessment**

Each candidate will be required to pass a multichoice H&S test taken in an online environment under strict invigilation and undertake a practical assessment completing the inspection and test of a cabin electrical installation.

## **Outcome and Renewal**

Candidates who successfully pass this course are deemed capable of the testing of wiring systems to a pre-determined design and completion of the appropriate document (Pre-Delivery Inspection and Test Report).

The qualification is accredited with the ECA- MPBA CSCS card and certificate, valid for three years from the date of card issue.



#### **Required Resources and Equipment**

To undertake the course the candidates must have available:

- Access to a conference/meeting room with presentation facilities and adequate space for delegates and trainer. Training room to be occupied by a maximum of 7 (6 delegates + Trainer) all maintaining 1m+ distance at all times.
- Fully fitted module/container ready for PDI with connection to supply without RCD protection for practical test use.
- Electrical lock off kit to contain suitable equipment to make safe a module/container for test (i.e. Padlock, Labelling, Hasp, Socket Blank, etc).
- Suitable electrically insulated tools for tests and basic modifications.
- Test equipment for employee use to include:
  - 1. Voltage/Continuity tester (Fluke T90 or equivalent)
  - 2. Proving Unit (Fluke PRV240 or equivalent)
  - 3. Multifunction Electrical Tester (Megger MFT1711 or equivalent)
  - 4. Test probes (including wandering lead)
  - 5. Socket Tester (Martindale CP501 or Equivalent)



ECA/MPBA02 Modular & Portable Building in Service Electrical Repair, Modification and Maintenance

All candidates must have successfully completed course ECA/MPBA01 before undertaking the Level Two course. It is recommended that the course is taken within 12 months of completing Level One or the Level One renewal.

## Objectives

The aim of this three-day course is to provide the underpinning knowledge and practical skills to enable MPBA member company employees to undertake replacement, additions and upgrades of electrical systems associated with modular and portable buildings when on site or awaiting dispatch from the depot.

#### **Course Content**

- 1. Electrical Legislation and Regulations
- 2. Practical Electrical Theory
- 3. Circuit Design
- 4. Allowable Installations (Power)
- 5. Allowable Installations (Lighting)
- 6. Practical Assessments

#### **Course Assessment**

During the course each candidate will be assessed by the trainer in aspects of electrical installation on both a static training rig and a modular building.

## **Outcome and Renewal**

Candidates who successfully pass this course are deemed capable of adding new circuits and / or additional fittings to an existing system or can work on a system which is on site and connected to an electrical supply and completion of the appropriate documentation.

Note, the Level Two course **does not** repeat the H&S Test for card application, the date of expiry of the ECS card will not change and will be as per the issue from Level One.



## **Required Resources and Equipment**

To undertake the course the candidates must have available:

- Access to a conference/meeting room with presentation facilities and adequate space for delegates and trainer. Training room to be occupied by a maximum of 7 (6 delegates + Trainer) all maintaining 1m+ distance at all times.
- Fully fitted module/container ready for PDI with connection to supply without RCD protection for practical test use.
- Electrical lock off kit to contain suitable equipment to make safe a module/container for test (i.e. Padlock, Labelling, Hasp, Socket Blank, etc).
- Suitable electrically insulated tools for tests and basic modifications.
- Test equipment for employee use to include:
  - 1 Voltage/Continuity tester (Fluke T90 or equivalent)
  - 2 Proving Unit (Fluke PRV240 or equivalent)
  - 3 Multifunction Electrical Tester (Megger MFT1711 or equivalent)
  - 4 Test probes (including wandering lead)
  - 5 Socket Tester (Martindale CP501 or Equivalent)

In addition, it is the responsibility of the customer to provide the following **components and parts** for use during the practical training and assessment:

- Suitable 2.5mm and 1.5mm cable of the type used normally (i.e. Twin and Earth or Flex)
- Earth and Brown Sleeving
- Single Gang Pattress (Minimum of 4)
- Double Gang Pattress (Minimum of 4)
- Single Gang Switch Fused Spurs (Minimum of 3)
- Double Gang Twin Sockets (Minimum of 4)
- Single Gang Single Way Light Switch
- Surface Mount PIR
- Surface Mount Trunking (Various sizes as required)
- Suitable Light fittings for standard buildings (LED or Fluorescent) (Minimum of 3)
- Wall mounted panel heater
- Wall mounted water heater
- Suitable circuit breakers for installed distribution board



ECA/MPBA_C	Modular & Portable Building Pre-delivery Electrical Condition Inspection,
	Testing and Reporting and In Service Electrical Repair, Modification and
	Maintenance Combined Course

The combined course is the delivery of courses ECA/MPBA01 and ECA/MPBA02 as a single course back to back, this enables efficiency in delivery, reducing the overall delivery of the two three day courses by one day. The combined course is delivered over five days.

#### Objectives

Given the underpinning knowledge, practical competencies, tools, test equipment and documentation at the end of the course, candidates will be able to:

- Visually inspect a range of cabin electrical installations for common visual defects.
- Carry out safe isolation of a cabin.
- Carry out the appropriate electrical tests, complete and sign off the electrical pre-delivery inspection report form.
- Undertake replacement, additions and upgrades of electrical systems associated with modular and portable buildings when on site or awaiting dispatch from the depot.

#### **Course Content**

- 1. ECS required Health and Safety
- 2. Electrical Legislation and Regulations
- 3. Basic Electrical Theory
- 4. Understanding Electrical Components
- 5. Understanding Installation Methods
- 6. Practical Electrical Theory
- 7. Circuit Design
- 8. Electrical Testing Approach
- 9. Allowable Installations (Power)
- 10. Allowable Installations (Lighting)
- 11. Practical Assessments

#### Course Assessment

Each candidate will be required to pass a multichoice H&S test taken in an online environment under strict invigilation and undertake a practical assessment completing the inspection and test of a cabin electrical installation, and the practical assessment of electrical installation.

#### **Outcome and Renewal**

Candidates who successfully pass this course are deemed capable of the testing of wiring systems to a pre-determined design and completion of the appropriate document (Pre-Delivery Inspection and Test Report) and of adding new circuits and / or additional fittings to an existing system or can work on a system which is on site and connected to an electrical supply and completion of the appropriate documentation.

The qualification is accredited with the ECA- MPBA CSCS card and certificate, valid for three years from the date of card issue.



#### **Required Resources and Equipment**

To undertake the course the candidates must have available:

- Access to a conference/meeting room with presentation facilities and adequate space for delegates and trainer. Training room to be occupied by a maximum of 7 (6 delegates + Trainer) all maintaining 1m+ distance at all times.
- Fully fitted module/container ready for PDI with connection to supply without RCD protection for practical test use.
- Electrical lock off kit to contain suitable equipment to make safe a module/container for test (i.e. Padlock, Labelling, Hasp, Socket Blank, etc).
- Suitable electrically insulated tools for tests and basic modifications.
- Test equipment for employee use to include:
  - 1. Voltage/Continuity tester (Fluke T90 or equivalent)
  - 2. Proving Unit (Fluke PRV240 or equivalent)
  - 3. Multifunction Electrical Tester (Megger MFT1711 or equivalent)
  - 4. Test probes (including wandering lead)
  - 5. Socket Tester (Martindale CP501 or Equivalent)

In addition, it is the responsibility of the customer to provide the following **components and parts** for use during the practical training and assessment:

- Suitable 2.5mm and 1.5mm cable of the type used normally (i.e. Twin and Earth or Flex)
- Earth and Brown Sleeving
- Single Gang Pattress (Minimum of 4)
- Double Gang Pattress (Minimum of 4)
- Single Gang Switch Fused Spurs (Minimum of 3)
- Double Gang Twin Sockets (Minimum of 4)
- Single Gang Single Way Light Switch
- Surface Mount PIR
- Surface Mount Trunking (Various sizes as required)
- Suitable Light fittings for standard buildings (LED or Fluorescent) (Minimum of 3)
- Wall mounted panel heater
- Wall mounted water heater
- Suitable circuit breakers for installed distribution board



ECA/MPBA01RN Modular & Portable Building Electrical Renewal.

All candidates that have completed Level One only are required to attend a renewal course, undertaking the H&S test and certification assessment to renew credentials.

The renewal course is run over two days with a number of knowledge refreshers and updated modules, followed by the test and practical assessment of a test and inspection.

An updated qualification that is accredited with the ECA- MPBA CSCS card and certificate, valid for three years from the date of card re-issue.

There is a single renewal course for delegates that have completed Level 1 only or Level 1 and Level 2. It is important that the current ECS card number and confirmation of Level 2 completion with certificate number is provided on booking.

For candidates renewing Level 1 and Level 2 there will be an additional element to the practical assessment that would specifically include a circuit modification or addition.

#### **Required Resources and Equipment**

To undertake the course the candidates must have available:

- Access to a conference/meeting room with presentation facilities and adequate space for delegates and trainer. Training room to be occupied by a maximum of 7 (6 delegates + Trainer) all maintaining 1m+ distance at all times.
- Fully fitted module/container ready for PDI with connection to supply without RCD protection for practical test use.
- Electrical lock off kit to contain suitable equipment to make safe a module/container for test (i.e. Padlock, Labelling, Hasp, Socket Blank, etc).
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  - 3. Multifunction Electrical Tester (Megger MFT1711 or equivalent)
  - 4. Test probes (including wandering lead)
  - 5. Socket Tester (Martindale CP501 or Equivalent)



#### **Related publications**

The primary publications associated with this qualification are the IEE Wiring Regulations: Requirements for Electrical Installations BS 7671 2018 and the On Site Guide. This publication can be obtained from the IET **www.theiet.org**.

Other publications referred to in this qualification are The Electricity at Work Regulations 1989, The Health and Safety at Work Act 1974, The Management of Health and Safety at Work Regulations 1999 and The Provision and Use of Work Equipment Regulations 1998, copies available via **The Stationery Office Limited**.

Level Two candidates will receive a copy of the on-site guide for reference.

#### **Course Delivery**

#### Updated August 2021

We are now able to offer training on a client site or within our custom fitted training centre located in Coventry.

## **Onsite Training**

The maximum number of delegates for an onsite training course is restricted to six (6) with the responsibility of the organising company to ensure that sufficient space is provided to ensure social distancing measures are adhered to. There is no minimum number of delegates.

With reduced numbers we are also able to offer compressed course delivery on both Level One and Level Two courses for courses of up to two delegates.

## **Training Centre**

The new MPBA Training Centre is located at C12 Generator Hall, Electric Wharf, Coventry, CV1 4JL. Dates for Level one and renewal courses will be published regularly at **www.mpba.biz** and sent via email to all main training contacts.

Each course will be restricted to six (6) delegates to ensure quality of delivery and social distancing.

# **Terms and Conditions**

## Updated August 2021

A course is not considered booked until receipt of a purchase order. The course will be invoiced in full on receipt of purchase order. Payment is required within 7 days of invoice, if payment has not been received before the date of the course delivery the course will not go ahead.

If the course is cancelled up to 7 days before the delivery date a cancellation fee of £160 per delegate will apply. If cancelled after 7 days before the delivery date the full value of the course will apply.

Once booked, a delegate space cannot be cancelled, however, up to 7 days before the delivery of the course a delegate may be changed if the training location does not.

If a delegate does not attend day three of the training the course is none refundable and the full course (for that delegate) will need to be rebooked.

Changing the dates, delegate numbers or locations of training could require a full cancellation and rebook of the course. Changes will be accommodated as practically as possible, but fees may apply.

All fees quoted are subject to VAT at the standard rate.

## **Retests and Replacement Cards**

If the delegate fail's the H&S assessment within the 5 mark tolerance during the course a single opportunity to retest will be given during the course. If the delegate is required to take a retest following the training, the cost will be £120 per delegate per test and will require the delegate to travel to a location provided by the MPBA to carry out the retest.

Following issue, if a replacement ECS card or certificate is required following the course due to loss a fee of £75 will be charged.

Please note that whilst we issue a physical ECS card all holders may access an electronic one using the MyECS app that can be downloaded onto most smart phones. https://www.ecscard.org.uk/content/Manage-your-card-with-MyECS



## **Course Fees**

Updated August 2021

## **Scheduled Courses**

All three-day courses will be charged at £750 per delegate. All two-days courses will be charged at £550 per delegate.

#### **In-house Courses**

The following matrix shows the cost of delivery to member companies as cost per course and the alternative view of cost per learner.

	Course Cost									
	Level 1		Level 2		Renewal		Level 1 & 2 Combined Course			
			2 day course on		1 day course on					
Number of	2 day course on	3 day Course (3	site	3 day Course (3	site	2 day Course (2 days	2 days Online, 3	5 days Onsite		
learners	site (compressed)	days onsite)	(compressed)	days onsite)	(compressed)	onsite)	days Onsite			
1	£1,935	£2,785	£1,935	£3,035	£1,080	£1,930	£4,215	£4,715		
2	£2,170	£3,020	£2,170	£3,270	£1,310	£2,160	£4,680	£5,180		
3	n/a	£3,255	n/a	£3,505	n/a	£2,390	£5,145	£5,645		
4	n/a	£3,490	n/a	£3,740	n/a	£2,620	£5,610	£6,110		
5	n/a	£3,725	n/a	£3,975	n/a	£2,850	£6,075	£6,575		
6	n/a	£4,300	n/a	£4,640	n/a	£3,170	£6,630	£7,470		

## **Proposals and Bookings**

To receive a proposal for a specific course and/or to arrange preliminary dates please contact:

Abbie Hipkiss Training Administrator

Email: **Abbie@mpba.biz** Office: 02475 901938 DDI: 02475 264484