

# CPCS renewal test factsheet



## Introduction to the CPCS renewal test

The industry-led CPCS Management Committee has determined that key safety-related knowledge must be checked on each category prior to the renewal of a CPCS Competent Operator (blue) card. The CPCS renewal test is the means by which blue cardholders will be tested on topics that reflect safety issues identified through consultation, that occur regularly on site.

For each topic identified there is a set of questions, from which a number will be included in the test and for which supporting information is provided in this factsheet. Each test will ask a total of 15 questions selected randomly to ensure all topics are covered.

The test will cover all categories within the scheme through modules. Some modules have been devised to cover a range of similar CPCS categories.

The CPCS renewal test is available on the CITB-ConstructionSkills Testing Services platform alongside the Health, safety and environment test.

The questions and answers will not be published but factsheets are available for each module to cover the topics.

## How to use this factsheet

Prior to taking the test, cardholders are advised to carefully study the factsheet, which will prepare them in deciding the correct answer or answers to each given question. Correct answers are based on legislation or good practice adopted, in the majority of cases, by the construction and allied sectors.

It is acknowledged that variations may occur depending on the nature of the operation or on how the machine is used. However the correct answer to each question is based on common practices or manufacturers' requirements for the majority of machine types within each module, and applies to this test irrespective of how a machine may be used within a particular activity or sector. It is important, therefore, that this factsheet is studied carefully.

The questions are selected randomly and will not appear in the order that topics appear in this factsheet.

If the card holder does not answer all the questions correctly, the score report issued after completing the test will indicate the topic areas in which the questions were answered incorrectly. The cardholder should, prior to retaking the test, re-study all topic areas.

## Scoring the test

To be successful in this module, cardholders need to correctly answer a minimum of 12 out of the 15 questions presented. However, because many of the questions are safety-related, in the majority of cases, a minimum number of questions per topic need to be answered correctly. Failure to do so, even if the overall minimum number of correct answers has been reached, may mean that the cardholder is unsuccessful on the test.

The top of each topic states the number of questions that will be presented for each topic and the minimum number of questions that must be answered correctly in order to pass the test.

## Concessions

To avoid duplication of questions where similar categories are held, booking concessions are provided. This means that, if several similar categories are held, only one module needs to be booked. The following chart indicates if there is a booking concession for this category.

Concessions are provided to holders of the category of Hoist.

### Other categories held:

MEWP – mast climber

### Needs only to book:

Hoist

**Note:** *The above concessions are an outline of what tests you may have to book; please refer to Module matcher for details of full concessions where more than one category is held.*

This factsheet has been designed to highlight only topics that have been identified through industry consultation area with safety issues or where good practice is often not complied with. The questions within the CPCS renewal test for this category also reflect this.

It is not intended as a training tool and cannot list all essential knowledge and understanding for this category. Operators must always follow manufacturers' requirements, industry good practice and be aware of their own limitations with the machine, and seek further guidance and help where needed.

Further information about the CPCS renewal test can be found at [www.cskills.org/cpcs](http://www.cskills.org/cpcs)

## Preparation for work *(Preparation)*

Topic scoring information: 1 correct answer required out of 3 questions presented to pass

- Hoists are in effect a platform or cage used to transport goods, people or a combination of both to different levels or landings of a structure. The platform (mainly used to transport goods) or cage (mainly used to transport people) is attached to a vertical mast which itself is fixed, usually by ties, to a structure, although free-standing units are available where heights are limited. Several methods can be used to elevate the cage or platform, for example, a winch and rope pulley system, which uses an externally static mounted motor, mainly on goods-only types or a rack and pinion system where the motor is situated normally within the cage structure.
- As with all plant and equipment, thorough pre-use checks must be undertaken that follow manufacturer's requirements. This information will be found within the operator's manual as well as on warning or information decals around the hoist and cage/platform. The operator's manual, which contains vital information, must be kept with the hoist. The hoist should not be used unless the manual for that model and type is available to the operator.
- As there is a variety of hoist types and models, the operator (anyone who is required to operate the hoist) must have undertaken familiarisation training in addition to basic training. This is to ensure that each operator understands the specific requirements for that particular type or model, which may differ from previous models they have operated.
- One of the key checks that must be undertaken on rack and pinion types is on the emergency lowering system. If the cage cannot be lowered from the internal controls, for example because of an electrical or mechanical failure, emergency lowering can be undertaken from within most cages and it is imperative that this function is checked according to manufacturer's recommendations.
- Another of the many checks that should be carried out before work starts is on the function of the landing gates' electric interlock system, which prevents the cage from moving unless the access/egress gates and doors are properly shut. Each gate should be checked individually in a designated sequence. A check should also be made to ensure that the area beneath the platform or cage is sealed off to prevent unauthorised entry whilst the hoist is in use.
- All types of hoist should be fitted with one or more safety or emergency-stop buttons and these should also be checked before work starts. Depressing an emergency stop button cuts working power, which subsequently isolates or cuts off lifting and lowering functions. Hoists are fitted with a variety of safety systems, such as limit switches which prevent the cage or platform from exceeding safe limits. Those that are adjustable can only be adjusted by trained and qualified installation and maintenance staff and not by the operator.

## Transporting loads *(Working tasks)*

Topic scoring information: 3 correct answers required out of 6 questions presented to pass

- All platforms and cages have a maximum weight limit which is determined by the hoist manufacturer and should be clearly marked on platform or cage. When calculating the load to be taken by the platform, the operator must consider the weight of any materials that may be loaded at different landings, so as to not overload the platform. The operator should also take into account any unprotected materials that have been left outside in wet weather, as they may become waterlogged, making them heavier than indicated on any labelling, tare sheet or other documentation.
- Where a combination of materials and personnel is being transported to another landing, the materials must be loaded in such a way so that they are not a trip hazard to personnel entering and leaving the cage, and that the load does not move during transit as this can cause injuries. Loads should, wherever possible, be placed equally and centrally in the centre of the platform or cage. If a load is to be carried that is close to the maximum carrying weight of the platform, and where the centre of gravity of the load is not central, the hoist installation company must be contacted, as the platform could be out of balance.

- Hoists are used by scaffolding teams or contractors to transport scaffolding materials to the required landings. In some cases, special platforms or cages are used that are specific to scaffold erection and allow scaffold tubing to be carried safely. If scaffold tubing is being carried in an adapted platform, no other materials can be transported at the same time. In all cases, the hoist can only be used by those within the scaffolding team and by those who have been trained to operate that particular type.
- Where scaffold tubing is being carried but cannot be evenly distributed, de-rating must take place. This means that the maximum load able to be carried must be reduced and the more uneven the load, the further reduction that needs to be made to the carrying capacity. If in doubt, the hoist installation company should be contacted at all times for further guidance. When transporting scaffold tubing, no part of any tubing can extend beyond the area or confines of the platform. Protruding scaffold tubing, has become jammed within the mast, damaging both the platform and mast, or in some cases has ejected the scaffold tubing, which has fallen down to ground level.

## Working safely

Topic scoring information: 2 correct answers required out of 4 questions presented to pass

- As hoists are used to access different levels of a multi-storey structure, they are exposed to weather conditions that may not be apparent at ground level, such as high wind speeds and changes to wind direction. The operator must know the maximum wind speed that the hoist can be operated in and shut down operations when the wind speed exceeds the manufacturer's criteria. The operator must also take into account gusts of wind or wind funnelling which can exceed safe the safe maximum caused by, for example, being between two buildings.
- During operation, the operator must ensure that the landing gates and platform doors are properly shut, locked and secured before the platform is operated. While lowering the hoist, the operator must ensure that the area below the platform or cage, particularly when the platform is approaching ground level, is clear of hazards and people.
- Goods only hoists are not designed or approved to carry persons. The only people that may travel in or on the platform of a goods only hoist are members of the erection team during erection, maintenance and dismantling activities. Many passenger-carrying hoists have an upper platform on the cage which houses the drive motor. The only time that an operator can be on the upper platform is when undertaking emergency lowering when access to the braking system is required. Where ground-based controls are fitted, they can again only be used in an emergency when people are being transported.

## Emergency procedures

Topic scoring information: 0 correct answers required out of 2 questions presented to pass

- Prior to using a hoist in new location which will be transporting people, a rescue plan needs to be devised in case of a mechanical or electrical malfunction that could trap people at height. The rescue plan and procedures should be communicated to all those who need to operate the hoist. Communication procedures should be agreed between those at ground level and those in the platform or cage if a malfunction occurs at height.
- On single-masted hoists, the emergency lowering process should be devised so that the platform or cage can be safely lowered by a single person within the cage. When any emergency lowering needs to take place, the platform should only be lowered to the next available landing.