

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The questions and answers will not be published but factsheets are available for each module to cover the topics.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

Other categories held:

Loader/securer – non STGO

Needs only to book:

Loader/securer - STGO

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

Preparation for loading and unloading *(Preparation)*

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

- The CPCS loader/securer category relates to an individual who, either as their occupation or as part of another role undertakes the task of placing items of plant onto and from a trailer or transporter, secures the item of plant and prepares the transporter for road transport. This will be in many cases the driver of the transporter and/or a designated assistant, to be called 'the operator' for the purposes of this factsheet. Accidents and incidents occur with loading /unloading operations and this factsheet aims to make loader/securers aware of their responsibilities and the good practice that needs to be followed, with many issues that are highlighted in this factsheet a result of past incidents and accidents. Road transport requirements covered within this factsheet are relevant to the movement of plant-type loads. Movements under a Special Types Goods Order (STGO) have additional requirements and, again, those that are relevant to transporting plant are incorporated.
- A risk assessment and method statement should be devised for all loading and unloading operations. This is unique to each type of plant or load, and should be constructed by a competent person. Amongst many factors, the risk assessment and method statement would normally identify all risks and measures to be taken, the weight, size and types of loads, loading method, types of load restraints to be used, proximity hazards that may be at the loading and unloading location and other factors such as soft ground. It is also important that the operator has been informed of the contents and the actions required of them and who else must take note of the contents.
- When the operator and supporting personnel arrive at a construction site to deliver or collect an item of plant, they must first report to the site manager and confirm the unloading or loading arrangements and location. As it is virtually mandatory to wear of personal protective equipment (PPE) on most sites, the operator needs to put on relevant items such as hard hat and high visibility items of clothing as soon as they exit the cab.
- Secured loads, including plant, are subject to movement during transport which, when the restraining or securing gear is released, can unintentionally move. Injuries and deaths have occurred after loads have moved or become unstable when securing or restraining gear has been released. Checks must be made before all loads are released and all personnel should be kept clear of the path of a potential moving load.

Working safety and at height *(Working at height)*

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

- When arriving at a loading or unloading location, conditions need to be taken into account before, during and after work. This includes nearby overhead power lines. Guidance from the Health and Safety Executive advises that any part of the transporter and its load plus the maximum height of a fitted boom, jib or extension on the load, is kept at least 9 metres from power lines mounted on wooden poles. A distance of 15 metres must be kept from power lines mounted on metal pylons. If a load needs to be placed within the stated distances, the electricity distribution company must be consulted in the first instance.
- Before an item of plant is placed onto the bed of a vehicle or trailer, consideration needs to be given to how the operator can safely exit the cab or operating station to get down to ground level as this will involve being at height. Work at height requirements apply at all times for which control methods such as the use of mobile steps or suitable temporary ladders and harnessing may need to be specified. Slips, trips and falls can occur especially where there are insufficient hand grip locations when climbing down to ground level. Furthermore, placing a large item of plant onto a vehicle bed can mean that the machine's access ladder/steps overhangs the width of the trailer, preventing the operator from safely stepping onto the vehicle bed or down to ground level.
- The same consideration for working at height also needs to be given when accessing the transporter bed to locate and secure any restraining/securing gear. Where temporary ladders are being used, amongst many factors, there should be at least 3 rungs or 1 metre of ladder beyond the landing level, such as the bed of the transporter and that there is sufficient foot penetration on each rung. This also applies to inbuilt steps or ladders on an item of plant where the build-up of mud or damaged steps can reduce foot penetration which

might lead to a slip and fall. Although commonly used, the side impact bars on a transporter or trailer are not considered suitable for climbing onto or off the bed as the surfaces of the bars are not slip resistant. Where the operator or another person accesses the transporter bed by walking up one of the ramps, the gap between the ramps should be in-filled or covered to prevent a fall between them.

Loading and unloading *(Working tasks)*

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

- Loading and unloading items of plant on the public highway is a common and sometimes necessary activity but one which requires additional care and planning before the loading or unloading operations begin. Other road users have been injured or killed following collisions with transporters that were loading and unloading on the public highway. The location of the loading and unloading operation needs to be taken into account and (aside from legal aspects), should be considered from other road users' perspective, for example by not parking the transporter on the brow of a hill or on bends with limited visibility. There should be sufficient signage and unloading and loading at dusk or in dark conditions is another particular hazard. In several instances, although flashing amber warning lights have been activated on the transporter, the plant on the transporter bed or the raised ramps themselves have masked the warning beacons, rendering them ineffective for others from which collisions have occurred. Operators also need to take into account that warning lamps situated on the rear of the ramps or the standard rear lights are ineffective when the ramps are lowered.
- Loading and unloading plant on the public highway in urban and built up areas means that the loading or unloading make need to take place in areas where there is pedestrian movement. The loading/unloading area should be within an exclusion zone that is physically segregated from pedestrians and cyclists, who are normally oblivious to the dangers of moving plant. The same criteria should apply to unloading and loading operations on a busy site as site workers can also be oblivious to the dangers of moving plant. After falls from height, contact with moving plant is the second biggest cause of fatalities on site. This further means that the need to reverse of a transporter should be considered. Good practice recommends that reversing is eliminated as a first course of action. If this is not practically feasible, then reversing should be minimised and only take place within a controlled area separate from moving vehicles and people.
- The securing methods vary with different types of plant so the operator needs to determine the required and correct method for each. Most manufacturers will stipulate how their machine should be secured, with the relevant information usually located within the machine's operator's manual and on decals placed around the machine. One principle that should be followed is that the machine's hydraulic system and/or the weight of a component cannot be relied on to prevent movement of the machine or its parts, such as the upper structure of a 360 degree excavator. In this instance, the boom and/or bucket need to be anchored to the trailer and not left resting on the transporter bed. When securing plant using a ratchet chain binder (which is commonly used for securing purposes), additional leverage should not be applied as the securing gear can be over-tightened.

Travelling to and from sites *(Travelling)*

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

- When travelling to a site or whilst on a site, the transporter may need to travel on temporary roadways, haul roads and inclines which in most cases are not equipped with kerbs. Driving too close to the edge of a temporary or minor roadway can cause the sides to collapse and vehicles have been known to overturn when driving too close. On a construction site, it remains the responsibility of the site manager or owner to ensure clear and unrestricted access to any loading or unloading area.
- When travelling to or parking at the loading/unloading location, a minimum distance should be kept from an open trench to minimise the possibility of a trench collapse. The same applies when loading and unloading close to a slope or bank with guidance indicating that, in principle, that the minimum distance that should be kept is twice the depth of the slope.
- Any oil leaks that are present before an item of plant is transported should be fixed or contained prior to travelling on the public highway. Road users have been fatally injured after leaking oil from an item of plant

contaminated the road surface. Dirt and debris left on the transporter bed can also be blown back onto the road surface during road travelling.

Road regulatory requirements (Regulatory requirements)

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

- Transporters naturally spend most of their working time travelling on the public highway for which Road Traffic Act requirements need to be followed. Before joining the public highway, the total height of the transporter and load when above 3 metres, must be, under the Road Traffic Act, displayed clearly in the cab and the overall height of the transporter/load checked to ensure that is displayed accurately in the cab.
- Bridge strikes by over-height vehicles are common. Bridges with a clearance of less than 16 feet 6 inches/5.03 metres are marked with the maximum permitted vehicle height and bridges with a full or partial arch tend to have goal posts or markers which the vehicle must keep between. Notification requirements apply where the height of a vehicle and its load exceed 16 feet 3 inches/4.95 metres. **Note:** *Network Rail guidance states that bridge markings are applied where the clearance is less than 16 feet 3 inches/4.95 metres.* If the load of a transporter does strike a railway bridge, the operator must immediately, as a first course of action, contact the telephone number as shown on the bridge quoting the bridge number.
- STGO movements require that an escort vehicle should be provided when the maximum authorised mass (MAM) exceeds 100 tonnes, and that there is a communication link between the STGO transporter and the escort vehicle when transporting abnormal loads. If a transporter can only be parked on the pavement to allow unloading to take place, it is legally allowed to do so, providing it can support the weight and not cause any damage, and as long as the driver remains with the transporter.