# Unit 112: Construction operations and civil engineering operations

# Worksheet 19: Modular paving – safe working practices (tutor)

**Task 1**

Read the information carefully and complete the gaps with the words from the bottom of the page.

**Manual handling**

Lifting and moving loads manually is one of the most common causes of injury at work.

Many manual handling injuries result from repeated operations, but even one bad lift can cause a lifetime of pain and disability. The Manual Handling Operations Regulations require employers to avoid the need to carry out manual handling which creates a riskof injury.

There is no truly ‘safe’ weight limit for manual handling operations. The degree of risk associated with lifting varies according to the nature of the load, the circumstances in which the lift takes place, how often the lifting operation is carried out and the weight of the item that is being lifted.

When manual handling is necessary, prevent injury by:

* Avoiding unnecessary handling.
* Before work starts, identify operations which involve either lifting heavy or awkward loads or repetitive lifting operations. It is essential to find out the weight of heavy items, which may have to be manually handled.
* Avoiding the operation altogether or using lightweight materials.
* Using mechanical aids, such as vacuum lifters or grabs for kerbs and paving.
* Positioning loads by machine and planning to reduce the height from which they have to be lifted and the distance over which they have to be carried.
* Setting limits on the size of commonly used products or material, e.g. not requiring anyone to manually lift building blocks, kerbs or paving weighing more than 20 kg.
* Ordering bagged materials in small, easily handled sizes where possible; most building products are now available in 25 kg bags.

Plan difficult manual lifts carefully, particularly if the load is to be shared. Remember, hazards arise when people are not equally matched in terms of size and strength and if they have not been trained to undertake multiple person lifts.

**RISK, LIFTED, LIFTERS, MOVING, MANUAL, COMMON, KG BAGS**

**Task 2**

Answer these questions on the storage of materials: true or false?

|  |  |
| --- | --- |
| Question | True or false? |
| 1. Bags of silica or kiln-dried sand should only be stored 8–12 bags high? | True |
| 1. You can store cement outside? | True |
| 1. Block paving slabs are delivered on banded pallets? | False |
| 1. Cement is best kept on the floor? | False |
| 1. Loose aggregates are best stored on sloping ground? | True |
| 1. Macintosh HD:Users:kenjohnson:Pictures:iPhoto Library.photolibrary:Masters:2014:02:09:20140209-193925:0WmpC6Ohn63GW2tBK1BX.jpgDoes this image show the correct storage method? | True |
| 1. You can store sand and sub-base in the same bay? | False |
| 1. Paving slabs generally come delivered banded together? | True |
| 1. Paving slabs are best stored standing on their edges? | True |
| 1. Macintosh HD:Users:kenjohnson:Pictures:iPhoto Library.photolibrary:Masters:2013:12:30:20131230-224833:hardstone_600x450_pressed_concrete.jpgDoes the image look safe? | True |