





# Manual Handling of Decking Sheets - Reducing the Handling Risk

**SIG.05** 

### **Tool Box Talk**

#### Introduction

Musculoskeletal disorders (MSDs) are problems affecting the muscles, tendons, ligaments, nerves or other soft tissues and joints and are the most common form of occupational ill health in the UK. Injuries to the back and neck are the most common form of musculoskeletal ill health and can be caused or aggravated by manual handling. According to the Manual Handling Operations Regulations 1992 (as amended) the definition of manual handling is 'any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or by bodily force'.

In 2008/9 1.2 million people who worked during the last year were suffering from an illness (long standing as well as new cases) they believed was caused or made worse by their current or past work. Just under a quarter of the total working days lost due to any work-related ill health or injury are due to back, shoulder and upper limb complaints. In 2008/9 of those reporting back or upper limbs complaints took an average of 16 days off work. They are the main reason for people having to leave the construction industry.

#### Why is this relevant to Metal Decking Installers?

The main hazards associated with the manual installation of metal decking sheets are the weight of the sheets (can weigh up to 150 kg but typically weigh 60-80kg although the decker does not support the full weight of the sheet), the repetitive nature of the work and poor posture during the work (bending down to install the sheets). These hazards create excessive stress and strain on the body, which can cause damage to muscles and tendons, and in the longer term may lead progressively to more serious injury.

#### What can I do to reduce the risk of Manual Handling Injury?

Due to the nature of the decking sheet and the environment in which the installations are performed there are currently no mechanical handling solutions therefore manual installation of the sheets is necessary.

Before commencing work check your employer has ensured the following:

- None of the packs have been double stacked
- None of the packs are overlapping
- The packs have been loaded out as shown on the deck GA layouts
- The stripe on the pack is pointing towards the setting out point
- Edge trim bundles are loaded out as detailed on the drawings
- Wherever possible, barrels of studs have been mechanically lifted to the level to suit stud welding programme
   If you notice any of the above are not in place, immediately contact your supervisor before commencing work.

The following are a few tips to reduce the risk of manual handling injury when handling the sheets:

#### 1. Plan your work activities

Ensure you have the correct PPE (i.e. cut resistant gloves\*, safety boots etc.). Do not spend the morning laying decking sheets and then the afternoon fixing the sheets as rotating your tasks reduces loading on the same muscles. When possible take frequent breaks to allow your muscles to rest and recover. It may be beneficial to perform some stretching / limbering up exercises before you start and on completion of your handling activities. Your Safety Adviser should have access to occupational health advice, if required.



#### 2. Think before handling/lifting

Within your team and prior to lifting the decking sheets plan the lift/handling activity. Where is the sheet going to be placed? Remove obstructions that may hinder the lifting operation. Always rotate the lifting and other tasks within the team. Always ensure the correct sheet is to be installed to prevent double handling of the sheets.







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## 3. Keep the Load Close to the Waist

Keep the decking sheet as close to the body as possible while lifting or supporting the sheet. The distance of the decking sheet from the spine at waist height is an important factor in the overall load on the spine and back muscles. If a close approach to the load is not possible try and slide the decking sheet towards the body before attempting to lift it.





## 4. Adopt a Stable Position

Your feet should be apart with one leg slightly forward to maintain balance (alongside the load if it is on the ground). You should be prepared to move your feet during the lift to maintain a stable posture.

#### 5. Ensure a good grip on the load

Always ensure you have a good grip on the load. Losing grip on the load may lead you to making a sudden movement when trying to regain control of the load therefore possibly increasing the risk of injury. *Never manoeuvre the decking sheets with one hand.* 

6. Before Commencing the lift, slight bending of the back, hips and knees at the start of the lift is preferable to either fully flexing your back (stooping) or fully flexing your hips and knees (full/deep squatting).



## 7. Don't flex your back any further while lifting

This can happen if your legs begin to straighten before starting to raise the decking sheet.



## 8. Avoid twisting your back or leaning sideways especially while your back is bent.

Keep your shoulders level and facing in the same direction as your hips. Turning by moving your feet is better than twisting and lifting at the same time.







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9. Keep your head up when handling and move smoothly. Look ahead, not down at the sheet once you have held it securely and do not jerk or snatch at the sheet as this can make it harder to keep control and can increase the risk of injury.

**10. Don't lift or handle more than can be easily managed.**There is a difference between what people can lift and what they can safely lift. If in doubt, seek advice or get assistance.

11. Drop the sheet then adjust
If precise positioning of the sheet is necessary, drop the sheet
first taking care so the sheet does not strike the body and
then slide it into the desired position.

12. Break loads down where possible Some materials such as edge trims, shear studs and closures can be split into smaller numbers to reduce the weight of each lift. Remember it is generally thought better to move lighter units more often even though this will require additional trips.



#### What do I do if I have any aches and pains?

The first thing to do is not to panic!! Most musculoskeletal aches and pains can be managed with the appropriate treatment and advice.

For MSDs, early reporting of any symptoms to management is essential. This allows your managers to review their risk assessments and attempt to rectify the problem. Your manager can then reduce the risk of other workers being affected by a similar injury, and limit the likelihood of the returning employee experiencing a reoccurrence of their injury. The general message if you suffer any aches and pains is that you should stay as active as possible, try simple pain relief and seek medical help if necessary – however returning to work at the earliest opportunity is vital. It may be that you can agree with your managers simple temporary measures, such as reduced hours or modified work load to assist in your return to work.

Contact with your management should not end when you return to work as regular discussions and review of the return to work process should ensure that actions taken have been effective. It can also help to identify any reoccurrence and prevent further injury. In many cases the steps taken, to minimise the risk of the MSD reoccurring and prevent further injury, will need to be kept under review. This can only be done effectively by talking changes over with your management.

#### **Editors Notes**

The Manual Handling Operations Regulations 1992<sup>1</sup> (as amended), apply to all construction work. They set out a framework for employers to tackle the risks from manual handling. Under these regulations, if employers cannot avoid manual handling where there is a risk of injury, they must assess their manual handling operations

Manual handling. Manual Handling Operations Regulations 1992 (as amended). Kevlar K+ Gloves