

# Great Western Painting

## Manual Lifting

### Manual Lifting Procedures

Prior to manual lifting, a hazard assessment will be performed using our hazard identification & risk assessment procedures.

The supervisor, working with employees who actually will perform the lifting will complete the hazard assessment taking into consideration the size, bulk and weight of the objects(s); determining if mechanical lifting equipment is required; determining if two-man lifting is required; determining whether vision is obscured while carrying the object and the condition of the walking surface or path where the object is to be carried.

#### Training:

Training will be given in proper lifting techniques and avoidance of musculoskeletal injuries. Below are lifting techniques that will reduce the likelihood of injury:

- a. lift objects comfortably, not necessarily the quickest or easiest way.
- b. lift, push, and pull with your legs, not your arms or back.
- c. when changing direction while moving an object, turn with your feet, not by twisting at the waist.
- d. avoid lifting higher than your shoulder height.
- e. when standing while working, stand straight.
- f. when walking, maintain an erect posture; wear slip-resistant, supportive shoes.
- g. when carrying heavy objects, carry them close to the body and avoid carrying them in one hand.
- h. when heavy or bulky objects need to be moved, obtain help or use a mechanical aid such as a dolly, hand truck, forklift, etc..
- i. when stepping down from a height of more than eight inches, step down backwards, not forward.
- j. Lift heavy objects close to the body -- avoid reaching out. The power zone for lifting is close to the body, between mid-thigh and mid-chest height. Comparable to the strike zone in baseball, this zone is where arms and back can lift the most with the least amount of effort.
- k. lift gradually and smoothly. Avoid jerky motions.
- l. maintain a clear line of vision.

Training will also be provided that addresses the general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries, job specific training on safe lifting and work practice, hazards, and controls, noted below.

The order of precedence and effectiveness of hazard control for manual lifting is as follows:

1. Engineering controls.
2. Administrative controls.
3. Personal protective equipment.

Engineering controls include the use of mechanical devices such as:

**Note: Supervisors will enforce the employee use of provided manual lifting equipment, see below.**

1. Dollies.
2. Hand trucks.
3. Lift assist devices.
4. Jacks.
5. Carts.
6. Conveyors.
7. Lift tables.

**The use of the above manual lifting equipment will be enforced by supervision.**

An additional engineering control could be as simple as Increasing the heat in the work area. Muscles are less likely to cramp in warmer temperatures.

Administrative controls include utilizing the following procedures:

**Note: As noted above, engineering controls precede administrative controls. If the use of lifting equipment, see above, is impracticable or impossible, two man lifts must be used.**

1. Using two (2) persons to perform the lift.
2. Increasing the time between lifts.
3. Lifting training.

Personal Protective Equipment would include, but not be limited to:

1. Using gloves to address cuts, firm grip and warmth.
2. Appropriate steel toed footwear to address slips and items falling on feet
3. Eye protection to prevent items hitting eyes.
4. Back braces.

### **Ergonomics & Manual Lifting:**

Correct Neutral Postures [Postures where the body is aligned and balanced while sitting or standing]. The head is kept upright and is not turned to either side more than about 30 degrees or tilted forward or backward more than about 15 degrees. When the worker is standing, the torso is not bent more than 10 to 20 degrees from the vertical position and the natural curves of the spine are maintained. The pelvis and shoulders should face straight ahead to avoid twisting the torso. The shoulders are relaxed and knees slightly bent. The arms hang normally at the side, with elbows close to the body. The elbows are not bent more than about 90 degrees and the palms face in toward each other and the center line of the body. The wrists are in line with the forearms and are not bent sideways, forward (towards the palm), or backward (towards the back of the hand.)

When lifting, every attempt should be made to not put stress on the body which is beyond the correct neutral posture.

### **Proper Lifting Techniques:**

Musculoskeletal Injuries are often caused by the obvious -- putting excessive strain on the lower back by lifting an object that is too heavy or awkward, or by bending and/or twisting while lifting.

However, lifting injuries are also caused by less obvious reasons:

- a. poor physical condition
- b. poor posture
- c. poor judgment (lifting, pulling, pushing an object that is obviously too heavy or awkward without seeking assistance or a mechanical lifting device.)

**NOTE: Where the use of lifting equipment is impractical, two man lifts must be performed.**

- d. lack of exercise
- e. excessive body weight

## **Investigation of Injuries:**

The Safety Director will investigate and document all musculoskeletal injuries caused by improper lifting and, as part of that investigation, incorporate those findings into work procedures to preclude a reoccurrence.

Injuries will be recorded and reported in compliance with 29 CFR 1904, *Recording and Reporting Occupational Injuries and Illnesses*.

A concentrated effort will be made to ensure that the corrective measures **do not create hazards** in and of themselves.

**To prevent injuries in the first place, supervisors will periodically evaluate our manual lifting techniques to assess the potential for and prevention of injuries.**

**As part of our risk assessment process, new operations will be evaluated to engineer out hazards before manual lifting is begun.**