



**DALHOUSIE  
UNIVERSITY**

**Department of  
Facilities Management  
Occupational Health and Safety**

## **Safe Job Procedure for Erecting Pole Jack Scaffolding**

### **Service / Shop**

This safe job procedure applies all shops or trades that use scaffolding.

**Effective Date: May 2014**

**Revision Date: May 2015**

### **Known Hazards**

- Falling objects
- No, or, improper supervision
- Employees falling
- Not using required safety parts and accessories.
- Scaffold tipping over
- Improperly planked platforms
- Loose, cracked, broken, missing, bowed, corroded or worn parts.
- Exceeding load restrictions
- Contact with electrical wires.
- Unstable footings, rough surfaces
- Improperly installed / assembled
- Poorly installed toe boards or railings.
- Irresponsible behavior or actions
- Scaffold collapse
- Falling from scaffolding
- Poor training in scaffold erection.
- Unsuitable access or egress

### **Job Specific Training Requirements**

- Erection, Alteration, Dismantling and Proper use of Scaffolds
- Fall Protection
- Proper training in the use of all required PPE
- Proper training in the use of all required tools and equipment.

### **Applicable Regulations / Standards / Procedures**

- Nova Scotia Fall Protection and Scaffolding Regulations (Under Review)
- Safe Job Procedures for tools and equipment that are to be used.

### **Personal Protective Equipment Requirements**

- Eye Protection
- Protective Footwear
- Hard Hats
- Work Gloves
- Full Body Harness and Life Lines
- Any other PPE required by the hazard assessment for the job to be performed.

## Safe Job Procedure

Job steps are listed in the order in which they must be completed. Key activities follow each step. Key steps and the associated activities must be followed in the order presented to achieve maximum efficiency in safety, production, quality and overall loss prevention.

- Set up of this scaffold system requires two people.
- The manufacturer's manual must be read and understood by all employees involved in the installation and / or use of this type of scaffolding.
- Perform a hazard assessment of the proposed work area.
- Establish the locations for the poles based on where the work must be performed and the length of work platform to be used.
- Assemble all components in the area where the scaffold will be erected.
- Check for damaged worn or broken parts before starting to assemble the scaffold.
- Replace all damaged or broken parts with manufacturer approved components before erecting scaffolding.
- Decide where the poles will be located in relation to the work to be performed and the length of platform to be used.
- Ensure that the distance between the poles is such that the work platform will extend 1 ft. to 2 ft. beyond each pole, or, the distance recommended by the manufacturer for the length of the platform being used.
- Install braces in line with pole positions.
- Ensure that roof brace fasteners are positioned in line with or just in front of the wall of the structure.
- On a shingled roof lift the shingles so that the brace can be fastened directly to solid wood.
- Braces fastened to either the roof or wall of the structure should be at a right angle to the wall of the structure.
- Ensure the braces are fastened to material with the holding power of at least a ½ inch thick piece of plywood.
- Braces should be positioned so that the working platform will not be more than 35.5 cm (14 inches) from the wall of the structure.
- Attach / secure each foot of the brace to the structure using a minimum of 4 – 3 inch screws.
- Up to 7.3 meters (24 feet) one roof or wall brace must be used. Additional braces can / should be used to ensure maximum stability.

- Clean each pole to remove any dirt, sand or other debris that might affect the movement of the pump jack on the pole.
- While cleaning poles check each one to ensure that they have not been damaged or bent.
- Remove damaged or unsafe poles from service and replace with a new pole.
- Raise the lower end of each pole a sufficient distance above the ground to allow the pump jack to be slid onto the pole.
- Support the poles with blocks of woods and ensure they are stable before installing the pump jack.
- Prepare and install pump jacks on poles.
- Once the pump jack is situated on the pole set the UP / Down selector in the UP position and, using complete pumping strokes, move the pump jack about a 1 foot up (towards the top) of the pole.
- Place a ladder against the wall of the structure so that it will allow a person to work on the brace and not create a hazard while the pole is being raised.
- Move the base of the pole so it is line with the brace.
- Erect each pole as follows:
  - One employee holds the base of the pole in place to prevent it from moving.
  - The second employee raises the top end of the pole over their head and walks slowly towards the base of the pole raising the pole as they move towards the base.
- Use a rope looped through the brace to assist in raising the pole if it is too heavy.
- When the poles are in the upright position the standing platform should be facing the wall of the structure.
- While one person holds the pole in place vertically the other should climb the ladder to attach the brace to the pole.
- Lock the pole into the brace by sliding the locking pin through the climbing hole and inserting a safety pin through the locking pin.
- Ensure all locking devices are securely in place.
- Move the pole into a plumb position. Use a level to ensure the pole is absolutely vertical.
- Lift one end of the platform on the erected pump jack.
- Ensure the other end of the platform is not in the way of erecting the other pole.

- Measure the approximate distance to the position of the next pole by using the work platform. For a 24 foot platform the poles should be about 20.0 feet apart in order to allow a 2.0 foot overhang at each end.
- Position the second pole so that the platform will overhang the required distance beyond each pole.
- Install a second wall or roof brace (which ever is required).
- Install the pump jack on the second pole and erect the pole by following the above steps.
- Lift the platform into place and check for specified overhang.
- Check to ensure the platform is no more than 14 inches from the wall.
- If working on soft ground a manufacturer designed pole base / anchor, or, a base plate made of two 1.0 foot square by  $\frac{3}{4}$  inch thick pieces of plywood must be nailed together to form a sill plate. A mud sill should rest on the sill plate.
- For extra stability install a second brace on each pole just above the pole base, or, base plate.
- Install the work platform on the jacks.
- Secure the platform to the pump jacks using short lengths of rope. Ensure that properly tied non-slip knots are used.
- Leave a small amount of slack in the rope to allow for minor movement when the platform is being raised or lowered.
- Install the floor panels on the platform. Floor panels should be 8.0 foot by  $\frac{1}{2}$  inch thick plywood cut to the required width.
- Install the end rails at both ends of the platform.
- Ensure that floor panels overlap a minimum of 305 mm (1 foot) to avoid tipping.
- Install the work bench brackets on the back of the pole as per the manufacturer's recommended procedures.
- Install the back rail tarp by following the manufacturer's recommended procedures.
- If not using a back rail tarp, install the back rail system, with a top and mid rail, as recommended by manufacturer.
- To test lifting the platform put the direction lever of each pump jack in the UP position and operate the pumping mechanisms.