



FRED SHEARER & SONS, INC.
ESTABLISHED 1916

Job Hazard Analysis		JHA # 4
Job/Task Title: Shaft Wall Installation		
Safe Job Procedure:		Revised 1/2024
<p>This JHA is for the safe and successful installation of shaft wall framing and shaft liner. Special emphasis is placed on Fall Protection, "Stop the Drop", and working with heavy, awkward materials.</p>		
<p>Required PPE: Hard Hat, Safety Glasses, Hi-Vis Vest, Cut-4 Gloves, Cut Resistant Sleeves, Knee pads (layout), and Work Boots</p>		
<p>Review JHA's 23,24,26,27,28,30,31,33,34: Power Tools and Equipment, MEWP and Aerial Lift, Material Handling, Powder Actuated Tools, Scaffold, Covering/Cleanup, LOTO, Fall Protection, Overhead Work</p>		
Step #1 Work Area Inspection		
Steps to Complete Job	Hazards	Preventive Measures
Survey and set up the work area.	Workers can be cut on sharp materials, sharp edges, or equipment. Possible trips, falls, and being struck by loose debris or unsecure materials.	1) Hard Hat, Safety Glasses, Hi-Vis vest, Gloves, Cut Resistant Sleeves (framing or cutting), Knee pads (layout), and Work Boots.
		2) Identify, eliminate, or mark all trip hazards such as, open holes, slippery conditions, rolling stock, or changes in elevations.
		3) Correct or note any changes in work area since last leaving it.
		4) Pickup loose materials and remove debris from work area.
Identify any stored energies in the work area that could be released due to the work being performed, or by being damaged.	Workers could release unknown or unsuspected energy due to damage, removal of system components, or exposure of system components.	1) Relocate stored energy components or system from work area.
		2) Deenergize and install LOTO (JHA #31) procedures to stored energy source.
		3) Install bulletproofing or mitigation to protect stored energy source.
		4) Barricade and tag area around stored energy source.



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Walk area to ensure that there is adequate lighting and electrical power supply.	Lack of lighting can impair the ability to see, causing trips, falls, cuts, etc. Lack of sufficient electrical power can cause circuit overloads and excessive number of electrical cords in the area.	1) Have temporary task lighting provided before work begins.
		2) Have temporary power provided before work begins.
		3) Minimize electrical cords in area. Verify the cords in use are rated for their expected use.
		4) All cords and lighting to be GFCI protected.
		5) All cords to be tested and marked according to current Assured Grounding protocol.
Coordinate work in the area with other trades.	Possible confusion and conflict due to multiple trades working in a limited area.	1) Communicate with other trades to avoid creating a hazardous situation by trade stacking. Coordination.
Working around elevator shafts and open holes.	Workers will be exposed to falls, trips, and electrical hazards.	1) Maintain GC's leading edge railing system if feasible. Do not lean over or work through railing. If leaving the existing railing system is not feasible, then start either Fall Arrest or Fall Protection procedures. Work with foreman to develop a fall protection plan. (JHA #33)
		2) If railing must be removed then create a "Controlled Access Zone" around the work area with temporary barricades and signage, restricting access to personnel.
Step #2 Layout		
Steps to Complete Job	Hazards	Preventive Measures
Laying out the shaft walls or soffits.	Worker has the potential to be exposed to strains, cuts, and falls.	1) Stretch and flex before beginning of shift and after lunch. Stretch throughout the shift when needed to reduce or eliminate muscle strains.
		2) Wearing knee pads is required when laying out.
		3) Post "Laser-In-Use" warning signs.
Drying off floor to snap chalk lines.	Worker has the potential to be exposed to burns, slips/trips, and sprains.	1) Squeegee floor of water before attempting to dry floor with weed burner.
		2) Inspect area for any combustibles prior to using weed burner and remove them.
		3) Ensure fire extinguisher is readily available adjacent work area.
		4) Use appropriate striker for igniting weed burner.



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		5) Turn off valve for the weed burner and the tank when not in use.
		6) At the end of shift turn off both valves and disconnect the weed burner from tank for storage. After the weed burner has cooled, secure it in the gang box. Secure propane tank in approved designated containment or chain up to gang box.
Step #3 Cutting Material		
Steps to Complete Job	Hazards	Preventive Measures
Operating a cutoff saw in the process of cutting metal framing components.	Worker could be exposed to excessively loud noise and possible electrical shock.	1) Hearing protection is required when noise exceeds 85db. <i>Metal chop saw produces 120db and higher.</i>
		2) Inspect cutoff saw and blade for any defects or damage.
		3) Inspect cords and ensure your connected to an approved power source with GFCI.
	Worker will be exposed to flying debris, sparks, and possible sharp metal.	1) Wearing of safety glasses and face shield is required.
		2) Set up cut station in a manner that will not allow sparks to damage adjacent materials such as glass, drywall, finished floor etc.
		3) Remove any combustible material from the area.
4) Ensure fire extinguisher is properly charged, currently inspected, and attached to cut station.		
Worker will be exposed to possible trips, slips, sprains, and strains.	1) Stretch and flex before beginning of shift and after lunch. Stretch throughout the shift when needed to reduce or eliminate muscle strains.	
	2) Set up the cut station to minimize lifting, reaching, bending, and kneeling. Stock materials near task area.	
	3) Utilize dump buggies for handling and transporting waste. Do not overload. Set up dump buggy so cut offs fall directly into it.	
	4) Set up station to support the material lengths required.	
	5) When feasible, keep materials stocked on carts for mobility.	
Cutting materials using hand tools.	Worker will be exposed to cuts/punctures.	1) Cut level 4 gloves and sleeves required for metal framing. Practice proper hand placement when cutting shaft liner.



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Step #3 Installation of Metal Studs/Track and Shaft Liner		
Steps to Complete Job	Hazards	Preventive Measures
Installing and attaching metal framing using a PAF, and impact/screw gun, and basic hand tools.	Worker has the potential to be exposed to electrical shock, strains, sprains, and cuts.	1) Position body in front of the work to avoid overreaching and unnecessary twisting. Minimize reaching overhead when using the impact/screw gun or PAF.
		2) When installing long or heavy pieces of material, utilize adequate crew size or mechanical means to safely handle installation and materials.
		3) Use cordless tools whenever possible.
		4) Partners are to work together to accomplish their task. Consider crew rotation throughout the day to avoid Strains.
		5) Down guy to keep area clear of debris, watch out for potential hazards, and pass materials up.
		6) When attaching track overhead, face shield, tight fitted safety glasses or spoggles are required.