

HSEQ Work Instruction (Ladders)

| 08-HSEQ-I-G | |
|-------------------------|------------------|
| Mgt. System Element #: | 08 |
| Value Functions (HSEQ): | HSEQ |
| Document Type: | Work Instruction |
| Site(s): | RTM-Boron |
| Department(s): | All |
| Hard copy control: | |

Requirements

1. Steps to comply with RT and RTM requirements.

- Personnel carrying out work under this procedure must be familiar with and comply with this procedure in full.
- A ladder is meant for means of access and egress and is not designed to be a working platform. To be using a ladder correctly means that 3 points of contact are maintained at all times

| Equipment and Tools | Competent Person |
|---|--|
| Hard Toe boots, gloves, Safety Glasses, Ladder, Tools as needed | Any personnel who have read and thoroughly understands this Work Instruction |

| Protective Equipment | Potential Hazards | Potential Incidents/Injuries |
|--|--|--|
| Hard toe boots, gloves, Safety Glasses | <p>Manual handling</p> <ul style="list-style-type: none"> • Repetitive movements, awkward positions, vibration, equipment weight, muscle fatigue • Overhead obstructions during ascending/descending • Ascending/descending, foot and hand placement <p>Gravity</p> <ul style="list-style-type: none"> • Uneven load, falling tools <p>Mechanical</p> | <ul style="list-style-type: none"> • Repetitive Strain Injuries (Back strain, carpal tunnel, etc.) • 3 point contact • Injury to head, back or shoulders from equipment in close proximity to ladder route • Falling tools/equipment • Abrasions, lacerations • Bruises, strains/sprains, breaks, head injury, spinal injury • Fall from height |

| | | |
|--|---|---|
| | <ul style="list-style-type: none"> Crushing/ Pinch Point <p>Fall From Height</p> <p>Uncontrolled Release of Energy</p> <ul style="list-style-type: none"> Line of fire Close proximity to hot process lines, air lines, electrical | <ul style="list-style-type: none"> Contact with steam, electricity, hot process lines normally out of reach from grade |
|--|---|---|

| Step # | Description of Job Step | HSE Risks/Hazards | Control Measures |
|--------|---|---|--|
| 1 | <p>Complete a Take 5</p> <p>Consider:</p> <p>Inspecting work area and look for hazards: hoses/cords that may be tripped on, other slip/trip/fall hazards etc. If area requires cleaning, do so prior to starting task.</p> <p>Ensuring level ground to prevent ladder from slipping</p> | See description | <p>Housekeeping activities</p> <p>Take 5</p> |
| 2 | <p>Select appropriate ladder (Step Ladders, Folding Ladder, extension ladder. See figure 1,2,3) to safely complete the task</p> <p>*Note* If a ladder selected that will put the user at risk of falling 6 ft. or more, Fall Protection must be worn and at a minimum a level 2 Risk Assessment (JHA/JSA) in addition to a Take 5 must be completed prior to use. Documenting: Any Emergency Response in the event of a fall</p> | <p>Fall from height</p> <p>Ladder falling/slipping off the wall</p> <p>Falling objects</p> | <p>Take 5</p> <p>Pre Operation Inspection</p> <p>PPE</p> <p>Fall Protection (If appropriate)</p> |
| 3 | <p>Inspect the ladder for any deficiencies:</p> <p>Attach the Pre-Operation inspection and any other Risk Assessment completed for the task to your Take 5</p> <p>During the inspection if the ladder is found to be deficient, take the</p> | <p>Ladder breaking</p> <ul style="list-style-type: none"> Poor maintenance, Lack of regular inspections Overloaded | Pre Operation Inspection |

| | | | |
|---|--|------------------|------------------------------|
| | ladder out of service a place a tag with "Do Not Use" in a highly visible spot | | |
| 4 | Establish an Exclusion zone. Place barrier tape to prevent unauthorized personnel from entering work area | Falling Objects | Take 5 |
| 5 | <p>Climbing the ladder:</p> <ul style="list-style-type: none"> • Face the ladder • One step at a time • One person at a time • 3 Points of contact at all times <p>In the cases of an extension ladder a ratio of 4:1 should be used (See figure 4) Example 20ft vertical: 5 ft. horizontal. Ideally the ladder will be at a 70-75 degree angle</p> <ul style="list-style-type: none"> • Tie off ladder at the top or secure at the bottom • Ladder should extend a minimum of 3 feet beyond the top of the object • Ladder should be no longer than 22 feet • Keep body inside handrails to prevent over-reaching • If the personnel involved are exposed to a potential fall greater than 6 feet, fall protection must be worn. An emergency response plan must be identified if Working over 6 feet. | Fall from height | Take 5 |
| 6 | <p>Dismounting the ladder:</p> <p>Descend the ladder one step at a time facing the ladder always maintaining 3 points of contact</p> | Fall from height | Take 5 Personal behaviors |

| | | | |
|---|---|--|------------------------------|
| 7 | Once task is complete. Clean up area. Place ladder in an appropriate storage area | Ladder deteriorates due to improper storage. | Personal behaviors Take 5 |
|---|---|--|------------------------------|

2. Visual references.



Figure1- Step Ladder



Figure 2-Folding Ladder



Figure 3- Extension Ladder

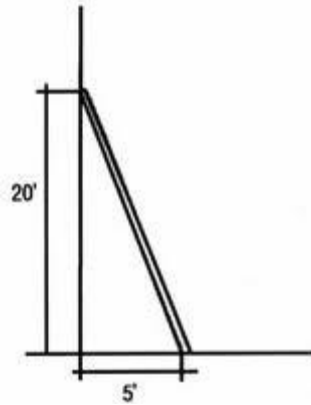


Figure 4- 4:1 Ratio

Responsibilities

Authorities and accountabilities or roles as they pertain to the work instruction

Everyone is responsible for identifying hazards with this procedure and initiating change management to correct those deficiencies.

The following personnel should assume the primary responsibility for the activities covered by this procedure:

- Contractors
- Operators
- Supervisors
- Superintendents
- Managers

References & supporting documents *(optional/as needed)*

| Doc Ref. | Document Title |
|-------------------------|----------------------------|
| Rio Tinto Standards C-4 | Working at Height Standard |
| | |