

**SAFE JOB PROCEDURE – GRATING, GUARDRAIL OR FLOOR PLATE REMOVAL**

**PURPOSE**

Establish the requirements for removing and reinstallation of grating, guardrails or floorplates while protecting personnel, property and equipment from potential hazards.

**HAZARDS**

The removal of grating, guardrails and floor plates presents risks for both the workers removing the material as well as other personnel near the affected area. Hazards include slips and trips, falls, crush and pinch point injury, injury from falling objects, as well as lifting related strains. Mitigate these risks by following the steps below.

**STEPS**

#	STEP	PRECAUTIONS
1	<b>Complete Project Hazard Assessment</b>	<ul style="list-style-type: none"> <li>• The job supervisor is responsible for assessing hazards specific to the site.</li> <li>• Ensure that only necessary grating, rails and plates are removed.</li> <li>• Consider PPE required and verify adequate training of workers or contractors to be on site (i.e., fall protection, H<sub>2</sub>S).</li> </ul>
2	<b>Complete Site-Specific Risk Assessment</b>	<ul style="list-style-type: none"> <li>• Give specific attention to such areas as:                             <ul style="list-style-type: none"> <li>○ Good housekeeping;</li> <li>○ Adequate PPE (i.e., safety glasses, heavy leather gloves, steel toes);</li> <li>○ Lifting safety.</li> </ul> </li> </ul>
3	<b>Warn and inform.</b>	<ul style="list-style-type: none"> <li>• Ensure the safety of site personnel by informing them of the areas where grating, rails and plates will be under modification.</li> <li>• Post warnings at the points of entry and egress.</li> </ul>
4	<b>Prior to lifting the grating, plate or rail.</b>	<ul style="list-style-type: none"> <li>• Determine the weight of the item to be lifted before attempting the lift.</li> <li>• Ensure the path of movement for transport of material is clear before beginning the lift.</li> </ul>
5	<b>Remove or uninstall grating, rails or floor plates.</b>	<ul style="list-style-type: none"> <li>• Use appropriate lifting tools and equipment (i.e., lifting hooks). <b>Do not use hands unless handholds or handles are provided.</b></li> <li>• Avoid placing hands near the opening of grating, plates, decking or manhole covers when removing or replacing them.</li> <li>• Be alert for pinch points.</li> <li>• Request assistance in lifting, when necessary, then lift together and coordinate movements carefully.</li> <li>• Maintain proper footing when prying, lifting or carrying.</li> </ul>

		<ul style="list-style-type: none"> <li>• Be aware of potentially unsafe conditions that may arise if a prybar or lifting bar should slip.</li> </ul>
6	<b>Install covers, barricades or guardrails.</b>	<ul style="list-style-type: none"> <li>• Grating, plates or rails must be reinstalled at the completion of the work task or the shift. Otherwise, a floor hole cover must be installed.</li> <li>• Floor hole covers must be:             <ul style="list-style-type: none"> <li>○ constructed to adequately support at least twice the weight of any person(s) or equipment they may carry.</li> <li>○ cleated or secured with wire tie-downs, clips or other fasteners.</li> <li>○ be visibly identified with hazard signage (i.e., “Danger – Hole Cover – Do Not Remove”).</li> </ul> </li> <li>• Rigid barricading or guardrails must:             <ul style="list-style-type: none"> <li>○ be constructed of rigid material (i.e., wood 2x4 or angle iron) or of components capable of achieving the same level of comparable strength (i.e., wire rope and stanchions).</li> <li>○ have a complete top-rail of a height no less than 39 inches with no voids.</li> <li>○ have a complete mid-rail between top-rail and floor with the only exception being the designated access point to the opening.</li> </ul> </li> <li>• Never leave an opening unguarded. Post a watch if necessary.</li> </ul>
7	<b>Working in an area under removed grating, plates or guardrails.</b>	<ul style="list-style-type: none"> <li>• Workers in a barricaded area must wear fall protection where necessary</li> <li>• The area below the removed grating, plates or rails that may be affected by overhead hazards will be barricaded with signs posted to restrict access.</li> </ul>
8	<b>Reinstallation and completion.</b>	<ul style="list-style-type: none"> <li>• Ensure grating and plates are installed correctly, positioned correctly and fastened.</li> <li>• Remove barricades and covers only after verifying that all clamps and clips are properly secured.</li> </ul>

**ADDITIONAL DIRECTIVES:**

- Install permanent lifting handles for grating or plating that is routinely removed.
- Removed grating, plates or rails should be protected from movement or slippage. Secure by wiring down, installing clips or another fastener.
- Place removed grating, plates or rails away from traffic areas to prevent creating a tripping hazard or interfering with other contractors and work activities.
- Comply with all building, area and site safety rules.