

Guards

Design Specifications guards:

- The ArcelorMittal Asset Risk Management Standards are also to be used concurrently with the H&S Design Specification (AM ST 201). Where there is a Health and Safety Standard it will take priority over the Asset Risk Management Standard. In all cases ArcelorMittal shall comply with the Occupational Health and Safety Regulations that prevail in the country

Guard design:



- The minimum design of guardrails shall include the following (dimensions can be different by country):
- *A top rail, mid rail and toe board*
- The top rail shall be located 107 cm (42 inches) above the floor surface, ground or platform on which it is installed.
- The mid rail shall be approximately half way between the top rail and the floor
- The end of the rails shall not overhang the terminal post except where such a overhang does not constitute a projection hazard
- The toe-board shall be securely fastened to the vertical posts extending from the surface, floor, ground or platform to a height of not less than 12.5 cm (5 inches) and no more than 6.4 mm (1/4 inch) from the surface.

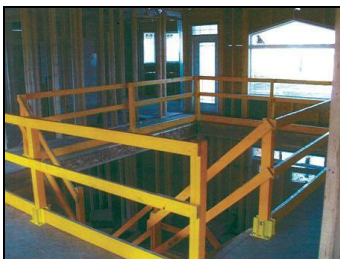


Permanent guardrails

- Permanent guardrails shall be installed whenever possible. Where a permanent guardrail cannot be installed, a removable guardrail which is typically affixed to their supports by insertion into sockets may be installed 107 cm (42 inches) above the surface on which it is installed to prevent falls to another level. The removable guardrail has also a mid rail and

Temporary guardrails

- The temporary safety railing system sets up virtually in minutes with the same strength and security as a permanent guardrail.
- **Swing gates** that allow access through a guardrail shall be: self closing
- Installed so that a deliberate action (pulling on the gate) is required to open the swing gate, to access the hazard contained by the guardrail. It shall not be possible to access the hazard by pushing or leaning on the gate. If possible gates have to open onto a platform.



Safety Work Instructions

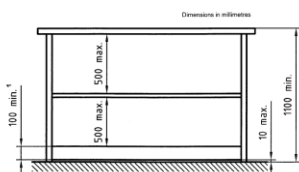
- Fall Protection (which may include engineered tie-off points) is required when installing or repairing a removable guardrail. Install a safe work instruction or permit system to work on the guard rails.

Safety Checks




- Periodic checks and inspections of the guards and fastening methods must be done by trained employees. The findings must be kept in records and corrective actions followed.
- All unsafe remarks must be solved immediately
- Regular maintenance have to be realized.




Main risks




- Lack of maintenance of guards, falling through the guard.
- Punctures or lacerations and to keep clothing from snagging due to bad design of the guards.









Required checklist




- 






Have responsible persons been nominated and trained to maintain and inspect guards?
- 






Are railings/guards sufficiently dimensioned and fastened so they withstand the required loads?
- 






Where standard railings are provided, do they meet the specifications?
- 



Is every temporary floor opening guarded by a standard railing?
- 



Regardless of height, are all open –sided floors, walkways, platforms, or runways guarded with e standard railing and toe board if they are above or adjacent to any dangerous equipment or operation? And placed at a large enough distance from the danger points?
- 



Can self closing doors be opened without excessive force?
- 



Are the top rails designed so they allow for all persons to use a power grip?
- 



Are all handrails and railings provided with enough clearance between the handrail or railing and any other object, avoiding to injure the hands whilst using and guaranteeing a good grasp in an emergency?
- 



Are there assembly instructions made, especially information on the method of fixing?

This document has to be used as a help before starting the work or performing a SFA