## **Chapter 20 - Appendix D: Requirements for Designated Areas**

- Warning lines will be erected around all sides of the work area.
- The rope, wire, or chain will be flagged at not more than 6-foot intervals with high visibility material.
- The rope, wire, or chain will be rigged and supported in such a way that its lowest point (including sag) is not less than 36" from the roof surface and its highest point is no more than 42" from the roof surface.
- After being erected, with the rope, wire or chain attached, stanchions will be capable of resisting, without tipping over, a force of at least 16 lbs. applied horizontally against the stanchion, 30" above the roof surface, perpendicular to the warning line, and in the direction of the roof edge.
- The rope, wire, or chain will have a minimum tensile strength of 200 lbs. and after being attached to the stanchions, will be capable of supporting, without breaking, the loads applied to the stanchions.
- The line will be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.
- Materials will not be stored within 6' of the roof edge unless guardrails are erected at the roof edge. If materials are piled higher than the top of the toe board, paneling or screening must be installed to the height of the midrail. If the materials are stacked higher than the midrail, paneling or screening must be installed to the height of the top rail. The paneling or screening must be installed for a sufficient length to protect the employees below. Openings must be small enough to prevent objects from falling through the openings.
- For work that is both infrequent and temporary, warning lines will be erected not less than 6' from roof edge when no mechanical/mobile equipment is used. When mechanical/mobile equipment is being used, the warning line will be erected not less than 6' from the roof edge which is parallel to the direction of the mechanical equipment operation, and not less than 10' from the roof edge which is perpendicular to the direction of mechanical/mobile equipment operation
- Work which is frequent in nature requires the warning lines be installed at least 15' back from the potential fall exposure.
- Workers performing work outside of the warning line, toward the roof edge, must utilize a travel restraint system or a personal fall arrest system.
- Warning lines may only be used on low-sloped roofs (pitch of less than or equal to 2 in 12) and as part of Form 1: Fall Protection Work Plan (FPWP).