

# [Applied safety engineering](https://assignbuster.com/applied-safety-engineering/)

[Engineering](https://assignbuster.com/essay-subjects/engineering/)

a) Each employee must be provided fall protection by the employer on a scaffold that is greater than 10 feet elevation from the lower level. A qualified individual has to determine the possibility and safety giving fall protection for the workforce that is erecting or taking to pieces the supported scaffold.
b) The top rail must be between 38 and 45 inches (0. 9- 1. 2 meters). Mid rail should be close enough to the halfway point between top rail and platform surface. Whenever a crosspoint of crossbracing is utilized as mid-rail, it has to be a region of 20-30 inches (0. 5-0. 8 meters) on top of the work platform.
c) The footing that supports the scaffold must have a zero gradient and be able to withstand the load. The poles, legs, frames, and the upright shall carry on the mudsills and the bottom plates.
d) Scaffold and its components should at least withstand a load that is 4 times the load that it was actually designed for. Suspension rigging of the scaffold should be at minimum 6 times the designed load.
e) Prior to each and every work shift and following any situation that has the ability to compromise the structural integrity, a qualified individual has to examine the scaffold and the elements of the scaffold so as to check for any noticeable defects.
f) A person who is able to establish existing and hazards that may occur in the future and working conditions that are not favorable and has the authority to correct things.
g) Training, i. e. erecting, disassembling, shifting, using, restoring, looking after, or examining the scaffold so as to be able to establish the related work hazards.
Inspection, i. e. scaffold and its components are inspected so as to avoid any situation that could have any effect on the integrity of the structure and to give permission for repair if any.
h) An engineer is required to design scaffolds that are not stationary at the time the workforce is working on them and the design of brackets on frames that are fabricated on the scaffold to be used to give support to the cantilever loads plus the workers.
i) Access must be provided whenever the platform is greater than 2 feet above or lower than the point of access. Access that is direct is allowed in a situation that the scaffold is less than 14 inches horizontally and lesser than 24 inches.