

## **OSHA Training Toolbox Talk: Fall Protection Systems - Anchor Points for Fall Arrest Systems**

*[Reference 1910 Subpart D / 1926 Subpart M]*

You've got your full body harness on and properly adjusted, and you've attached the proper end of your lanyard to the back D-ring on your harness. The next step is to attach the other end of your lanyard to an anchor point. But selecting the wrong anchor point could have some painful, or even deadly, ramifications. That means you must put some serious thought into what you hook off to with your lanyard. So, let's discuss some general principles about anchor points for fall arrest systems.

First of all, be aware that when you free-fall and then hit the end of the lanyard, the shock load created can significantly exceed the total combined weight of your body plus any clothing and tools you may be holding; depending on the distance you free fall, perhaps up to 10 times your total combined weight. So, only attach to an anchor point that a qualified person has determined will support two times the maximum shock load applied when someone of your total weight falls. And never tie off to objects such as, but not limited to, guardrails, scaffold posts, ladder rungs or side rails, window mullions, roof vent pipes, electrical conduit, ductwork, gas or sprinkler pipes, or ceiling tile grids, as these items are almost never suitable anchor points for a personal fall arrest system.

Secondly, when presented with two or more suitable anchor points, keep in mind that, all other things being equal, the higher the anchor point, the better. That is because OSHA fall protection standards require us to limit our free fall to no more than six feet, when feasible, and attaching to the higher anchor point will lessen the distance you will free fall. The benefits are you are less likely to make inadvertent contact with objects below you, and you will generate less of a jolt when you reach the end of the lanyard. Of course, you should also select the shortest lanyard possible when performing your job to reduce your fall distance. And in cases where attaching the lanyard to a high enough anchor point to limit your free fall to six feet or less is not feasible, get with the Competent person to look at alternatives, such as using a retractable lanyard or a travel restraint device.

Another good thing to keep in mind is to select a suitable anchor point that is located as close to the center of your body as possible; ideally, directly over your head. Doing so lessens the propensity of your body swinging sideways, like Tarzan, and inadvertently striking a nearby object.

Also remember that many anchor points are designed for only one person to tie off to, and would therefore not be suitable for two or more people to use simultaneously. So only use an anchor point that someone else is also attached to after confirming with the Competent person that it will support the potential load of everyone attached at the same time.

Lastly, remember that manufactured portable anchors, which are used on many jobs, must be attached to approved supporting structural members using the manufacturer's specified fasteners and installation instructions. Do not take shortcuts when installing these devices, or they could fail.

These are just a few general principles to keep in mind about anchor points for our fall arrest systems. Does anyone have any other safety tips regarding anchor points that you would like to discuss today? Thank you for your participation, and please be sure to sign your name on the training certification form so you will get credit for attending today's toolbox training session.

