CONNECTING HARDWARE & COMPATIBILITY

Make a Safe Connection

WHEN assembling fall arrest and restraint systems, it is essential to use a dependable method for connecting components. Typically, such systems are connected to anchor connectors and then full body harnesses. More complex systems such as vertical and horizontal lifelines may have four or five separate connecting points. Regardless of the number and type of connections used, components must remain securely fastened once they are assembled.

Fall arrest and restraint systems are often temporary arrangements. This means that those who assemble them must make informed decisions in the field about the type, size and location of connectors to be used. Using incompatible connectors can result in an unsafe system.

Once assembled, fall arrest and restraint systems are normally slack and tend to become twisted while their users move around. If a worker falls, the entire system must straighten out and become taught to arrest the descent. As this occurs, the system's snaphooks, carabiners and D-rings roll over each other. Many falls and fatalities have been caused by a condition known as rollout. Rollout occurs when two incompatible connectors cause one or both to open and inadvertently come apart. Snaphooks, carabiners, rope, webbing and D-rings are all susceptible to rollout.

Every type of connector has compatible and incompatible partners. Under the right conditions, all connector designs can be rolled open. Some people in the fall protection industry believe that as long as locking hardware is used, components can be connected to anything. This assumption is both false and very dangerous. A basic understanding of the design and use of specific connecting hardware will allow users to make safe decisions about component compatibility.