

Wave of the Future



**DENNINGTON
SAFETY GEAR**

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SAFETY AND HEALTH DEPARTMENT REPORT

by Frank Migliaccio



The Non-Typical Ironworker

Everyone in the world thinks ironworkers only do one thing; put red iron up above the earth to form the skeleton of the sky scrapers reaching toward our sun. Believe it or not, we do much more than that. We put reinforcing steel in concrete. We place ornamental handrails and fencing on or around soon to be completed buildings. We build the jail cells that house many of our friends. We build and put up

curtain wall systems, high-speed rail systems, and miles and miles of welding on anything having steel, aluminum, or any other metal needing to be joined.

The one thing we are not known for in the outside world is our ability to solve problems that confront ironworkers everyday. Problems affecting the safety and health of our brothers and sisters. Yet some of our members have produced equipment to be used in the field to make our jobs easier or save our lives. One such ironworker was a fourth generation ironworker out of Local 591 in Shreveport, Louisiana.

He worked as a journeyman ironworker for over 23 years before seeing a need for a better fall protection harness. While working in Alaska, he was given, and required to use, his first safety harness. After inspecting this harness, he realized that it was impossible to both wear the harness and perform his duties as an ironworker. He took his problem to the contractor he worked for and explained the problem. He was instructed that if he saw a problem, then he was to try to fix it. He requested and was given a copy of the Federal OSHA Standard concerning personal protection equipment and fall protection. After doing his homework, he realized that the standard didn't take into consideration the elongation and deceleration of the lanyard. The one thing he did know was that he was not permitted to fall any further than 6 feet. The other concern was that, should he fall, the system would keep

him upright with as little stress as possible on his body. What the ironworker came up with was the Dennington Safety Harness, which employs totally new technology in fall protection. To date, the Dennington Safety Gear has received no lost time injury reports worldwide and is the only harness to meet the original Federal Specifications. The proof of this statement is the UL certification given only to proven equipment.

The Dennington Safety Harness eliminates more recognized hazards than you can count on both hands. This ironworker has incorporated calibration by weight classes in his harness, which protects a wider range of individuals. All other harnesses are a one-size-fits all shock absorbing system, whereas he devised a system which has four different weight classes. While demonstrating this product, the ironworker will hang in the harness for up to 45 minutes and teach about the hazards associated with fall protection. With any other system, this would not be possible, as there is a 3-5 minute window for rescue before a worker is faced with suspension trauma. If you recall, my September article in *The Ironworker* magazine entitled "Hanging Around" addressed this issue.

His use of new advanced technology eliminates eight recognized hazards. Listed are just a few of the hazards;

virtually eliminates slamming effect after a fall, loss of hardhat during a fall, and poor posture when a fall is in progress, replaces old EDD systems which are not guaranteed to engage.

If you ever get the chance to use the Dennington Safety Harnesses, give it a try. You just might be pleasantly surprised to see what has been invented to protect us, and how well it works. It just goes to show you that we do a lot more than just hang steel.

Ordinarily, *The Ironworker* magazine does not make endorsements or advertise any products other than the ironworker products found on the back page cover. I have asked that an exception be made in this case, because of the exceptional safety this device provides to our membership.

If you would like any additional information on this harness, visit the website at www.ldlunitedunion.com.



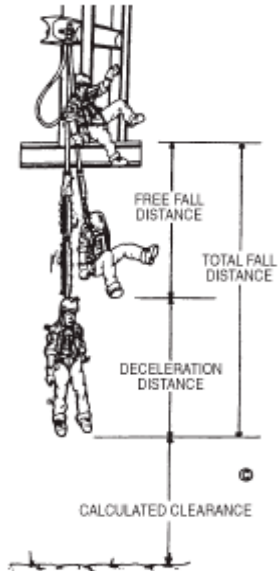
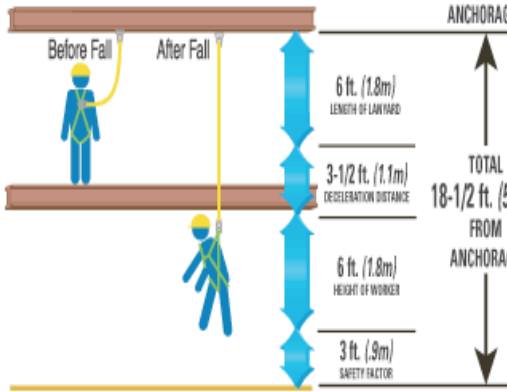

"IRONWORKERS' JOB LINE"

is now available on the web

please visit www.ironworkers.org

to find out which locals need workers, type of work, and who to contact.

The following portrays different statements of how fall distance is calculated.

 <p>Free fall distance is 6 ft (lanyard length), deceleration distance is 3 _ ft (tear away) and your ten foot building increment would be located around mid-torso of the bottom figure.</p>	 <p>Calculating Fall Clearance Distance Using a Shock-Absorbing Lanyard and D-Ring Anchorage Connector</p> <p>First, add the length of the shock-absorbing lanyard (6 ft.) to the maximum elongation of the shock absorber during deceleration (3-1/2 ft.) to the average height of a worker (6 ft.). Then, add a safety factor of 3 ft. to allow for the possibility of an improperly fit harness, a taller than average worker and/or a miscalculation of distance.</p> <p>The total, 18-1/2 ft. is the suggested safe fall clearance distance for this example.</p>	 <p>In a real world situation, the Dennington system allows a lower tie off point and basically combines both free fall and deceleration distance for a total 6 ft fall distance, period. This is the <i>original minimum fall protection standard</i> which did not allow the extra 3 _' elongation and would clearly let you contact the lower level.</p>
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It is common knowledge throughout the fall protection industry that you must tie off over your head and calculate fall distance as shown in the above pictures. Over the head tie off points do not exist in a fair amount of instances such as an ironworker on top of a structure being built or workers performing duties inside an aerial lift. With the Dennington system this calculation is no longer needed. You do not need to calculate fall distance and deceleration distance nor add a safety factor as this system will keep you within a six foot fall distance each and every time.

The first two pictures are misleading in more ways than one. They do not show true distances (ten ft increments between floors) since in the first picture, the lower level isn't portrayed although a higher level is shown as a tie off point. It is unrealistic to believe that any worker can reach up and tie off to a higher level. For example, if you were stand up in your office could you reach through the ceiling and hook off to the next level? A standard drop ceiling is 8ft between floor and ceiling with 2ft of clearance between the ceiling and the next floor. The tie off point portrayed is a fictional point.

Although the lower level is portrayed in the second picture, it is also inaccurate as a worker would not be able to stand on one level and reach up to tie off to the other. If you're not tied off over the top of your head, you're not properly rigged and in most instances, there is no way to be properly rigged which is a recognized hazard.

The Dennington Safety harness eliminates more recognized hazards (violations) than you can count on two hands versus any other fall protection system. Just with our first recognized hazard that can be eliminated, the Bureau of Labor Statistics figures show the following: Between 1996 and 2006 there were a total of 982,461 injuries to American workers in the U.S. due to falls to a lower level. Furthermore, there were 6,523 deaths to U.S. workers due to falls to a lower level.

See the CBS video for a demonstration of the new technology.

For more information contact Dennington Safety Gear or LDL United Union. (318) 635-5454



**THE DENNINGTON SAFETY HARNESS
UNIVERSAL HARNESS - MODEL U110**



The only fall protection harness that allows you to tie off at waist height on an aerial lift and remain in Federal compliance



ALSO PERFECT FOR USE IN WAREHOUSE AND MAINTENANCE APPLICATIONS

This harness is the basic unit needed for most people who don't have the need to carry any tools or equipment. This harness guarantees durability with a lightweight feel but with a hidden toughness



Close up of the Dennington shock-absorbing system



**THE DENNINGTON SAFETY HARNESS
TRADESMAN HARNESS - MODEL A110**

This is a multi-use harness and can be used for positioning, fall protection and emergency extraction. This is an all-in-one unit



Leg connections are offered with quick release buckles or tongue buckle legs



**THE DENNINGTON SAFETY HARNESS
ASCENDER HARNESS - MODEL PA110**

The Ascender harness was developed for use with the Powered Personnel Ascender but is also a multi-use harness which can be used in any application where the user needs to be in a seated position. The installation of the Dennington Shock Absorbing System makes it valuable as a fall protection harness, emergency extraction harness or a tower climbing, ascending harness. This is an All-In-One harness.



**THE DENNINGTON SAFETY HARNESS
TOWER CLIMBERS HARNESS - MODEL PA110**

The Tower Climbers Harness is 3 harnesses in one. Positioning Harness, Ascender Harness and a Regular Harness it comes with side positioning D-Rings, Butt strap padding and back support. If you need a multi purpose Harness, then this is the one for you.



**FOR INFORMATION, QUOTES AND TRAINING CALL
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