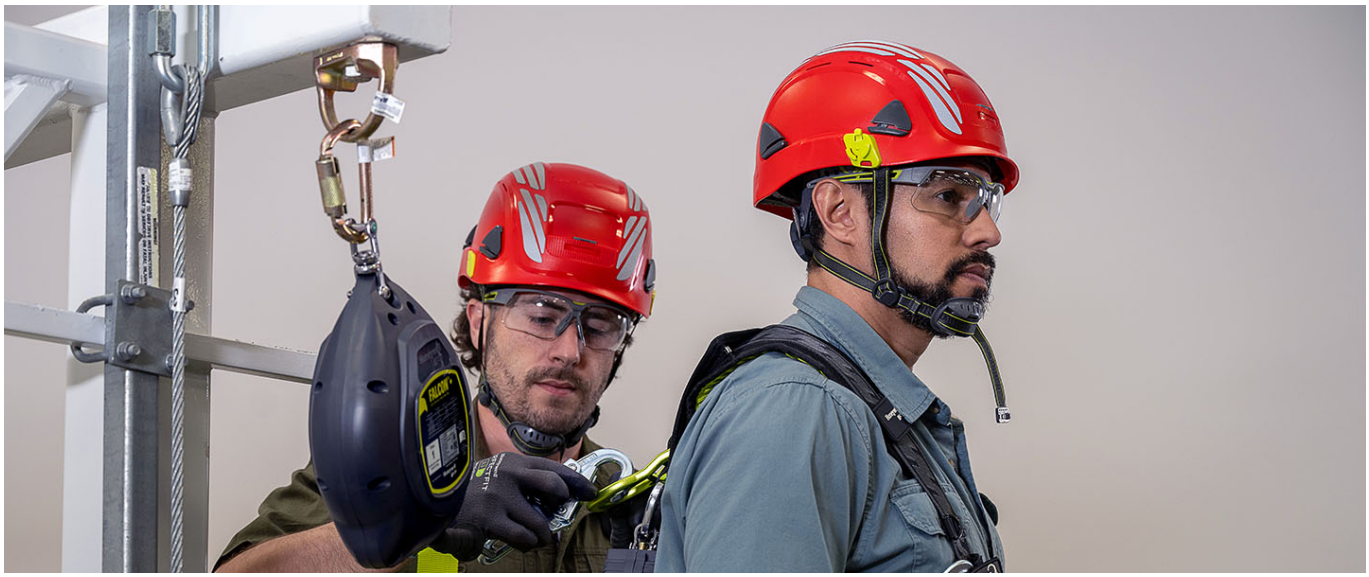


Safety

New Honeywell Safety Helmet Upgrades Protection Without Budget-Busting Side Effects

James Langford | Oct 10, 2024

Climbing-style helmets, made without brims that can smack into ladders and other equipment and sometimes limit vision, are becoming prevalent across all U.S. industries, from construction to manufacturing and utilities.

There's just one obstacle: Many of the attachments that workers used with older headgear, from respirators to face masks, aren't compatible.

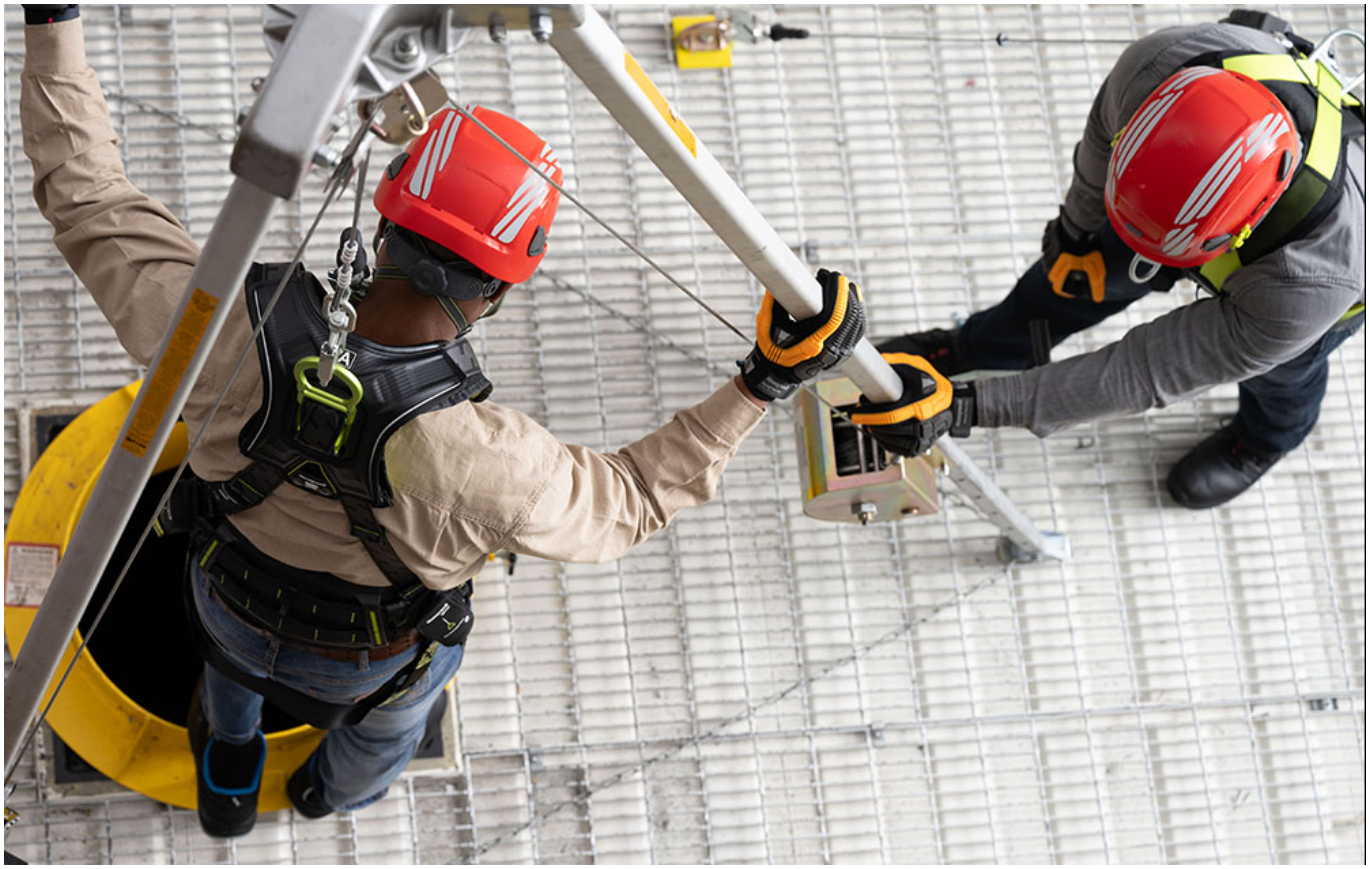
That's not a problem with Honeywell's new Fibre-Metal Type II Climbing Style Safety Helmet.

The company "designed this helmet to be functional with our other top-of-the-line devices, from hearing protection to welding screens," says Kevin Czechorski, the company's national sales manager for hearing and head protection. "Almost all personal protective equipment for the head, manufactured by Honeywell, is directly compatible with the climbing-style helmet."

Originally used by mountaineers, climbing-style helmets have grown rapidly in popularity after gaining an early foothold in industries where employees work on wind turbines and cell towers at dangerous heights, Czechorski says.

Traumatic Brain Injuries

Traditional helmets, which typically have brims, date to the early 20th century. Most were designed to protect the crown, or very top, of the wearer's head from blows and are designated Type I helmets in the American National Standards Institute guideline referenced in U.S. Occupational Safety and Health Administration head-protection regulations.



Honeywell's new Fibre-Metal Type II Climbing Style Safety Helmet features proprietary suspension technology. Proper selection, use and maintenance of personal protective equipment is the sole responsibility of the buyer. | Photo courtesy of Honeywell

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Newer Type II helmets, like Honeywell's climbing-style model, are made to cushion the back, sides and front of the head as well, offering protection from a broader range of workplace hazards.

"We didn't make a Type I version of this helmet," Czechorski says, "because the industry has only been asking for Type II."

Studies have indicated that advanced helmets can provide stronger protection than older styles, according to the ***National Institute for Occupational Safety and Health***, which is studying the performance and design of Type II headgear amid an initiative to prevent traumatic brain injuries, which are caused by blows to the head.

Accounting for as much as 25 percent of work-related trauma, such injuries have drawn heightened scrutiny after affecting players in professional sports including football, according to the agency.

Traumatic brain injuries are most common in the construction industry, where they killed 2,210 construction workers over a seven-year period, the ***National Institute for Occupational Safety and Health*** found in a mid-2010s review.

The costs for failing to comply with federal head-protection requirements intended to prevent such injuries can be significant. OSHA assessed $2.4 million in penalties on the ***construction industry*** in the 12 months through September 2024 and more than $199,000 on ***all other sectors***.

Violators may also risk higher healthcare bills and lost productivity when injuries sideline experienced workers, sometimes for weeks or months.

To give helmet buyers options for complying with applicable regulations, Honeywell's new helmet has been certified to meet standards including ANSI Z89.1—2014, which covers North American industrial

hard hats; CSA Z94.1 2015, which details Canadian specifications and EN 397:2012, which outlines requirements in Europe.

From Chin Strap to Non-Newtonian Foam

The Fibre-Metal Type II Climbing Style Safety Helmet's distinctive innovations include proprietary suspension technology that helps absorb and dissipate impact, while keeping a clearance between the shell of the hat and the wearer's head, Honeywell says.

A foam layer embedded with non-Newtonian material—whose viscosity varies with the force exerted on it—provides extra impact protection while a new headband ratchet enables easy adjustment for different head sizes, Honeywell says.

"The piece that really differentiates it from a regular hard hat is the integrated chin strap," Czechorski adds. "Many head injuries happen when workers fall, and if there's nothing holding the hat to their head, it slides off. The chin strap helps hold the helmet on their heads and protects them from a fall as well as from something falling onto their heads."

Non-vented helmets are available with a Class E designation, protecting wearers' heads from electrical shocks of up to 20,000 volts, the company notes.

Customers so far have been thrilled with the helmet, which was introduced in July, not least because it doesn't require them to swap out the accessories they used to modify previous Honeywell safety helmets for different jobs.

"One of the biggest concerns we heard from customers was that they wanted to move to a climbing-style helmet but they didn't want to have to swap out all of their hearing protection, face shields and other devices," Czechorski says. "This removes a lot of that apprehension."

How could a climbing-style safety helmet help you improve workplace safety? Tell us in the comments below.