



RITZ SAFETY

Learning Guide: Weatherproofing Your Safety

Essential Construction PPE for Any Environment



From blazing heat waves to freezing cold fronts and everything in between, construction crews face more extreme weather than ever before. As climate conditions grow less predictable, the demand for personal protective equipment (PPE) continues to rise. The right gear not only ensures compliance with safety standards but also protects workers' health, comfort and productivity on the job.

With record-breaking temperatures becoming more common, what are the biggest heat-related risks for construction crews, and which PPE innovations are proving most effective at preventing injuries?

Construction workers often do tough, physical work in high heat for extended periods of time, especially in the summer months. This puts them at risk for heat-related illnesses like heat exhaustion, heat stroke and dehydration. While drinking water and removing layers help, these steps alone may not provide full protection from extreme heat.

Moisture-wicking fabrics help regulate body temperature and improve comfort. They pull sweat off the skin and dry quickly, keeping workers cooler while helping to prevent chafing. By keeping the body cool and dry, these garments help reduce the risk of heat exhaustion and heat stroke.

Cooling vests offer another layer of protection. Some use ice packs to maintain low temperatures throughout the day, while others can activate with water and provide cooling without swelling or a slimy feel.

Hydration is another area that's often overlooked. Products that help fight dehydration by replacing fluids, electrolytes and minerals lost through sweat. Products such as cooling bandanas, towels and neck wraps offer simple yet effective ways to stay cool and protected in the heat. These accessories target high-heat areas on the body to aid in cooling and help lower the overall risk of overheating.

On the flip side, when temperatures drop below freezing, which cold-weather PPE solutions offer the best balance between protection and practicality for different construction roles?

Cold conditions bring their own set of challenges, including numb fingers, stiff joints and the real threat of frostbite. The key is to stay warm while still being able to move and work effectively.

Start with smart layers:

- Base layers: Moisture-wicking fabrics help pull sweat away from the skin.
- Mid-layers: Insulating materials retain body heat.
- Outer layers: Windproof and waterproof jackets and pants shield workers from the elements.

Accessories matter too. Thermal beanies, balaclavas or face masks protect exposed areas. A thermal liner adds warmth without compromising safety.

For hands, insulated gloves that still allow a good grip and touchscreen use are essential. And let's not forget the feet, waterproof, insulated boots with slip-resistant soles and adequate socks in addition to removable liners can keep workers steady and warm all day long.



Wet weather introduces a new set of hazards like slips, low visibility and soaked gear. What PPE helps crews stay dry, safe and efficient when working through storms?

Rain and stormy conditions can create slippery surfaces, reduce visibility and lead to soaked clothing or damaged tools. These factors increase the risk of accidents and delays. To keep things running smoothly and ensure safety, crews need rain-ready personal protective equipment (PPE) that offers visibility, traction and comfort without causing overheating or trapping moisture.

Look for:

- High-visibility rain jackets and pants: Waterproof, breathable fabrics are best. Reflective elements boost visibility.
- Moisture-wicking base layers: Stay dry underneath the rain gear to prevent chills.
- Waterproof boots: With good traction, insulation, and ASTM F3445-21 slip resistance. Reinforced toes and ankle support help, too.

Some outerwear includes smart safety features like emergency whistles, ID windows or reflective patches. And beyond apparel, don't overlook tool protection—covers for electrical panels and battery-powered equipment help prevent downtime and hazards.



What specific wind-related incidents have you seen on construction sites, and which PPE features should crews prioritize when working in gusty conditions?

Wind might not seem like a big deal, until it suddenly knocks over a tool cart or throws off someone's balance on a ladder. Whether it's an unsecured tarp becoming airborne or a worker struggling to stay balanced at height, gusty conditions demand gear that prioritizes security, visibility and stability.

Wind-Related Hazards to look out for include:

- **Falling objects:** Strong gusts can knock tools, materials or debris off scaffolding, endangering those below.
- **Loss of balance:** Wind makes it harder to stay steady—especially for workers on ladders, rooftops or elevated platforms.
- **Unstable coverings:** Tarps and temporary shelters may flap, tear or blow loose, creating trip hazards or damaging nearby tools.
- **Machinery issues:** Wind can interfere with crane operations or aerial lifts, causing unpredictable movements.
- **Worker fatigue:** Constant resistance from high winds wears crews down, increasing the risk of mistakes or injuries.

PPE that holds up to the wind:

- **Wind-resistant outwear:** Secure fit, breathable, with reinforced closures.
- **Hard hats with chin straps:** So head protection stays put.
- **High-traction footwear:** Helps maintain footing when stability is compromised.
- **Hi-vis apparel:** When dust or debris is in the air, visibility matters more than ever.



What other strategies help construction companies balance comfort, protection, compliance and cost when building their all-weather PPE programs?

Balancing safety and budget can be a challenge, especially when crews are working in constantly changing weather. But with a few smart strategies, it's possible to protect your team without overspending.

It starts with understanding the real conditions at each job site. By adapting PPE to real risks, companies can invest in what workers really need. Education plays a role too. When crews know how to properly wear, maintain and store their gear, it lasts longer and performs better.

Although high-quality PPE may cost more upfront, it typically offers better durability, comfort, and protection, which leads to fewer replacements, improved morale, and greater productivity. Also, layering systems let workers adapt to changing conditions without needing separate gear for each season.

Lastly, strong relationships with PPE suppliers can lead to long-term savings. Bulk purchases or negotiated contracts can reduce costs and help maintain a reliable supply of high-quality, compliant gear.

A thoughtful PPE program does more than meet safety standards; it supports worker health, comfort and performance.

