



**THE OFFICIAL
ERGODYNE**

**GUIDE TO
COLD STRESS**

TENACIOUS WORK GEAR BUILT TO ENDURE



TABLE OF CONTENTS

- 4-7 // **COLD STRESS: AN OVERVIEW**
Prevention + Solutions
- 8-11 // **LAYERING**
Thermal Work Wear
- 12-17 // **THERMAL GLOVES**
- 18-31 // **THERMAL HEADWEAR**
Thermal Hats, Caps & Beanies
Thermal Liners
Thermal Balaclavas
- 32-35 // **FLAME RESISTANCE**
- 36-39 // **WARMING PACKS**
- 40-43 // **TRACTION**
- 44-47 // **HYDRATION**
- 48-51 // **SKIN PROTECTION**



WHAT IS COLD STRESS?

The data doesn't lie: Seasons are becoming more extreme. And the ever-increasing unpredictability of Mother Nature is making it harder than ever for workers exposed to her wild weather swings to prepare.

Take the record-setting winter of 2017-2018, for example. Long stretches of extreme cold matched with powerful blizzards put much of North America in a deep freeze many have not seen in their lifetime. Even areas like Louisiana, Texas and Florida were impacted by sizable snowfall and temps that plummeted well below average. In many parts of the U.S., winter didn't release its grip until well into April.

With these cold-weather extremes as a backdrop, it's more important than ever to be able to properly identify the most common cold-related illnesses, knowing what treatments to seek and how to prevent them in the first place.

Know the Risk

When the body temperature drops below 98.6° F (or 37° C), blood begins to flow away from the extremities to heat the body's core. This immediately cools exposed skin and extremities, and increases the risk of cold stress, specifically frostbite and hypothermia. According to the Centers for Disease Control and Prevention (CDC), early signs and symptoms of cold stress include shivering, fatigue and confusion or disorientation. They can evolve to include blue skin, a slow pulse, and even loss of consciousness.

Cold Related Illnesses

Hypothermia, frostbite and trench foot are the most common cold-related illnesses.

Trench Foot

- » **How it happens:** Occurs in damp or wet environments that are just above freezing
- » **Symptoms:** Numbness, swelling, blisters open sores. Feet may turn red or blue as a result of poor blood supply. If left untreated, trench foot can turn gangrenous
- » **How to treat it:** Remove wet socks and footwear. Clean feet with warm water and dry thoroughly. Seek medical treatment immediately and do not wear socks when sleeping or resting

Frostbite

- » **How it happens:** Blood leaves the extremities to protect vital organs in the body's core
- » **Symptoms:** White, grayish or bluish skin. Cold, hard or waxy feel. May itch, burn, or feel numb. Blistering and hardening of skin are signs of extreme frostbite
- » **How to treat it:** Get out of the cold, and gradually warm the affected skin. Place frostbitten areas in warm—not hot—water. Wrap affected areas in a warm blanket and seek emergency medical help immediately

Hypothermia

- » **How it happens:** Body heat is lost faster than it's produced. Core body temp drops below 95°F (35°C)
- » **Symptoms:** Shivering, poor coordination, confusion, slurred and slow speech, hallucinations or changes in personality
- » **How to treat it:** Treat the worker very gently and do not apply external heat to re-warm. In mild cases, move to warm area and stay active. Cover head and body with dry clothes or blankets. Drink a warm (not hot) drink. Contact emergency medical personnel in more moderate cases. In severe cases, hospital treatment is required

Prevention + Solutions

Working safely in bitter cold conditions requires planning, regular breaks to get warm and layering up in the right PPE.

Layering

There is no single magic garment able to adapt to the ever-changing environmental variables of winter the way a proper layering system can.

- » **Smart solutions:** A breathable, wind/water-resistant outer layer, an insulating middle layer and a breathable, moisture-wicking base layer provide the protective barriers needed to combat cold. Protect extremities with thermal headwear and work gloves. Supplement with warming packs for feet, hands and liners

Traction

Ice and snow make for treacherous terrain that leads to nasty slips and falls.

- » **Smart solutions:** Ice cleats that fit over workboots provide a simple solution for stable footing

Hydration

Dehydration in cold environments is a major risk, especially since lower temperatures suppress thirst (the body is focused on regulating core temp more than fluid balance).

- » **Smart solutions:** Hydration packs encourage more fluid intake than bottles

Skin Protection

Provides safe and effective broad-spectrum UVA/UVB protection against sunburn.

- » **Smart solutions:** KREW'D® SFP 50 sunscreen

Plan Ahead

Cold related illnesses and fatalities are 100% preventable when you know the risks, symptoms and solutions. With expert training, support and endless innovation, Ergodyne is here to help you lead the way in making the Workplace a Betterplace™.



// LAYERING

Because there is no single magic garment able to adapt to all the ever-changing environmental variables of winter the way a proper layering system can, experts recommend wearing at least three layers of loose-fitting clothing.

1. Base Layers

Moisture is your enemy. Sweat and/or water on the surface of the skin will draw heat away from the body, cooling it rapidly. When the goal is to stay warm, productive and agile, a moisture-wicking, quick-drying layer is key. Venting under arms and a slightly loose, non-compression fit garment also creates a breathable layer of air insulation.

2. Mid Layers

The human body loses 65 percent of its heat through radiation once the air temperature drops below 68°F (20°C). And this second layer—often your work gear or uniform—not only provides an added layer of insulation from the cold to trap body heat, but allows the wearer to react to changing temps and adjust their warmth by removing or adding layers as needed.

3. Outer Layers

Wind and precipitation pull heat away from the body (AKA convection). To guard against this, the third layer features durable materials designed to stand up to abrasion, wind, rain and snow, as well as the cold. Additionally, insulated shells should also allow for air and moisture to pass through to the outside, with venting adding another level of temperature control.



6435

Thermal Base Layer - Long Sleeve Shirt

- » Stretch fabric, brushed interior for warmth and comfort
- » Anti-odor treatment helps you remain unscented
- » Moisture-wicking treatments keep you dry
- » Raglan sleeves, flat seams, thumb loops and long tail cut



POCKETS
3 3
 INNER OUTER
 • REAR POCKET



INTERIOR POCKET WITH HEADPHONE CORD PORT

6466

Thermal Jacket

- » Rugged 500D Nylon shell with water-repellent treatment
- » 1600D Nylon reinforcement zones
- » Removable hood with adjustable draw cords
- » YKK® zippers



6480

Thermal Base Layer - Bottoms

- » Stretch fabric, brushed interior for warmth and comfort
- » Anti-odor treatment helps you remain unscented
- » Moisture-wicking treatments keep you dry
- » Flat seams and tagless waistband

6471

Thermal Bibs

- » Rugged 500D Nylon shell with water-repellent treatment
- » 1600D Nylon reinforcement zones
- » Full-length YKK® zippers on each leg for easy on/off
- » Reflective accents keep you safe and seen



REMOVABLE PE FOAM KNEE PADS



POCKETS
0 3
 INNER OUTER



// THERMAL GLOVES

Many so-called winter work gloves are actually retro-fitted all-season gloves crammed with cheap insulation and made using materials that actually absorb water and let cold air in. Here's how to spot winter hand protection that works.

Exterior

Ripstop nylon with a DWR (Durable Water Repellent) finish not only fends off the wind and the wet stuff, it will stay pliable in plummeting temps. If you need a little extra grip and dexterity, look for coated winter gloves with dipped palms for better material handling in cold temps.

Insulation

To maintain warmth and dexterity, look for gloves with dual-zone insulation that use a heavier insulation on the back of the hand and lower-weight insulation on the palm.

Waterproofing

Serious winter work gloves are built with a waterproof membrane to shut out moisture from the outside while allowing sweat to escape.

Tech-Friendly

The ability to perform basic mobile device tasks without exposing hands to the elements can be the difference between staying on track or stopping to warm up.



819WP

Extreme Thermal Waterproof

- » Dual-zone 3M™ Thinsulate™ Insulation
- » Weather-resistant ripstop outer shell + DWR finish
- » Touchscreen-capable thumb and index finger
- » Waterproof/windproof breathable membrane insert

814

Thermal Utility

- » Insulated fill for cool to cold temps
- » Weather-resistant outer shell
- » Durable synthetic leather palm
- » Touchscreen-capable thumb and index finger



818WP

Performance Thermal Waterproof

- » Dual-zone 3M™ Thinsulate™ Insulation
- » Waterproof/windproof breathable membrane insert
- » Weather-resistant ripstop outer shell + DWR finish
- » Touchscreen-capable thumb and index finger
- » Also available in HV Orange



814CRG

Thermal Utility + Cut Resistance

- » Nex-gen Armortex® for extreme cut protection
- » Insulated fill for cool to cold temps
- » Weather-resistant outer shell
- » Contrasting color fingertips for hand signaling



816

Thermal Flip-Top

- » Fleece-lined mittens convert to half-finger gloves
- » Mitten pocket and thumb stow easily when not in use
- » Weather-resistant outer shell
- » Durable synthetic leather palm
- » Contoured gathered elastic cuff w/ ID space



817WP // 817

Reinforced Thermal Utility

- » Dual-zone 3M™ Thinsulate™ Insulation
- » Weather-resistant ripstop outer shell + DWR finish
- » Rugged palm and fingertip reinforcements
- » Touchscreen-capable thumb and index finger
- » **817WP:** Waterproof/windproof breathable membrane insert



925WP

Performance DIR + Thermal WP

- » Dual-zone 3M™ Thinsulate™ Insulation
- » Waterproof/windproof breathable membrane insert
- » Full TPR armor + technical foam for max protection





825WP

Winter Work Glove

- » Dual-zone insulated with 80 grams (palm) and 150 grams (back of the hand) 3M™ Thinsulate™
- » Insulated thermal shell can be removed to utilize separate inner liner for hand protection during high-dexterity tasks
- » Waterproof shell blocks moisture and wind to keep hands dry

7551

Coated Winter Work Gloves - Waterproof, Cut-Resistant

- » 13g HPPE with a soft 10g brushed acrylic fleece liner for comfort and warmth
- » ANSI A5 cut protection
- » Fully coated latex protects hands from water and cold air
- » Sandy, nitrile-dipped palm for secure gripping



7401

Coated Winter Work Gloves

- » 10g brushed acrylic fleece liner for soft comfort and warmth
- » Latex coated palm is flexible and durable
- » Lightweight knit for easy handling of equipment and materials
- » Knit construction and elastic wrist form a snug fit
- » Meets EN 388: 2131X



7501

Coated Winter Work Gloves - Waterproof

- » 15g polyester with a soft 10g brushed acrylic fleece liner for comfort and warmth
- » Fully coated latex protects hands from water and cold air
- » Sandy, nitrile-dipped palm for secure gripping
- » Dual layer of latex and nitrile remains flexible in cold weather for easy handling of equipment and materials



// THERMAL HEADWEAR

While the long-held belief that about 50% of body heat escapes through the head has been debunked, the face, head and chest are more sensitive to changes in temperature than the rest of the body. And any part of the body left exposed in cold temps leaves workers at risk for cold related illness.

Thermal Hats

We've come a long way from the winter hats your mom made you wear as a kid. High-tech materials, insulation and thoughtful design deliver enhanced warmth matched with dry, breathable comfort that won't overheat.

Thermal Liners

Much like balaclavas, thermal liners provide a boost of warmth underneath head protection. Though not as versatile (or fun to say) as balaclava, options like pockets for warming packs and optional facemasks allow workers to customize comfort and protection in changing conditions.

Balaclavas

Like a scarf, facemask and hat all in one. Balaclavas have become popular on worksites for their versatility, breathable/moisture-wicking comfort and ability to fit under head protection.



BLACK

LIME

6802

Classic Trapper™ Hat

- » Faux fur detail and quilted satin crown lining
- » Durable wind- and water-resistant shell
- » 60 grams of 3M™ Thinsulate™ Insulation

6812

Ribbed Knit Beanie

- » 100% acrylic, stretchable ribbed-knit fabric
- » One size



6819BT

Be Tenacious™ Beanie

- » 100% acrylic shell
- » CoolMax™ lining
- » 100% tenacious look



6804

Lighted Beanie

- » Dual action LED light system for up-close task and distance lighting
- » Premium compression fleece
- » Includes 4 LEDs with a light output of 48 lumens



6818

Dry Acrylic/Fleece Beanie

- » 100% acrylic shell
- » 40g of 3M™ Thinsulate™ flex insulation
- » Soft fleece liner
- » One size

6810 // 6815

Stretch Cap - Half/Full Face

- » 100% polyester knit
- » One size
- » **6810:** Half cap style
- » **6815:** Full face style





6806

Cuffed Ribbed Knit Beanie

- » 100% acrylic stretchable rib-knit fabric for a snug fit
- » Suitable for all seasons
- » One size fits most, multiple color options available



6887

2-Layer Winter Headband

- » Heat-trapping polyester fleece grid
- » Resilient stretch in back for comfortable, one-size-fits-all
- » Contoured design for full coverage



6491

Reversible Thermal Multi-Band

- » Reversible, double sided for two-in-one functionality
- » Interior soft fleece provides warmth & comfort
- » Exterior moisture-wicking polyester absorbs sweats



6960

Fleece Neck Gaiter

- » Lightweight, breathable thermal fleece
- » Versatile for wear around neck or pulled over nose/mouth/ears
- » Angled cut designed for no-bulk layering

6492

2-Piece Thermal Multi-Band

- » Soft fleece provides warmth & comfort
- » Moisture-wicking polyester absorbs sweat
- » Anti-odor treatment for long-lasting freshness





- 6840 // 6842**
2-Layer Fleece Liner - Economy
 » Shell: 100% polyester with PU coating
 » Lining: 100% polyester fleece
 » Hook & loop straps

- 6952**
3-Layer Liner w/ Sherpa
 » Shell: 100% polyester
 » Mid-Layer: 100% polyurethane foam
 » Lining: 100% polyester sherpa
 » Warming pack pockets/
 Hook & loop straps



- 6842HV**
2-Layer Fleece Liner - Hi-Vis Lime
 » Shell: 100% oxford polyester
 » Lining: 100% polyester fleece
 » Warming pack pockets/
 Hook & loop straps



- 6867**
3-Layer Liner w/ Poly Shell
 » Shell: 100% polyester
 » Mid-Layer: 100% polyurethane foam
 » Lining: 100% polyester fleece
 » Warming pack pockets/
 Hook & loop straps



- 6850 // 6852**
2-Layer Liner w/ Cotton Shell
 » Shell: 100% cotton twill
 » Lining: 100% polyester fleece
 » Warming pack pockets/
 Hook & loop straps

- 6877**
3-Layer Liner w/ FR Modacrylic Shell
 » Shell: 60% modacrylic/
 40% cotton blend EBT 6.4 cal/cm²
 » Mid-Layer: 100% polyurethane foam
 » Lining: 100% polyester fleece
 » Warming pack pockets/
 Hook & loop straps



- 6860 // 6862**
2-Layer Liner w/ FR Modacrylic Shell
 » Shell: 60% modacrylic/
 40% cotton twill blend
 EBT 6.4 cal/cm²
 » Lining: 100% polyester fleece
 » Warming pack pockets/
 Hook & loop straps





6870/6871

2-Layer Winter Liner + Mouthpiece Kit

- » 6852 2-Layer Winter Liner, Shoulder length
- » Shell: 100% cotton twill, Lining: 100% Polyester fleece
- » 6870 Standard Mouthpiece
- » 100% cotton twill/100% polyester fleece

6811z/6811zi

Zippered Knit Hat w/ Bump Cap

- » 100% soft dry acrylic
- » 40 grams of 3M™ flex stretch insulation
- » One size fits most
- » Machine washable
- » Zippered compartment holds the 8945 bump cap



6872/6876

2-Layer FR Winter Liner + Mouthpiece Kit

- » 6882 2-Layer FR Liner, Shoulder length
- » Shell: 60% modacrylic/40% cotton twill, Lining: 60% modacrylic/40% cotton fleece
- » 6872 FR Mouthpiece



6893z/6893zi

Zippered Balaclava w/ Bump Cap

- » Polyester fleece for warmth in extreme conditions
- » Reflective accent for higher visibility
- » Long length
- » One size fits most
- » Zippered compartment holds the 8945 bump cap



6874/6878

3-Layer Liner w/ Neoprene Mouthpiece

- » 6867 3-Layer Winter Liner, Shoulder length
- » Shell: 100% polyester, Mid layer: 100% PU foam, Lining: 100% polyester fleece
- » 6874 Neoprene Mouthpiece

6802z/6802zi

Zippered Trapper™ Hat w/ Bump Cap

- » Durable, windproof & water resistant nylon outer shell
- » 40 grams of 3M™ Thinsulate™ Insulation
- » Interior quilted satin crown lining with PU backing
- » Adjustable YKK buckle with chin strap for perfect fit
- » Zippered compartment holds the 8945 bump cap





6844

**Balaclava Face Mask
- Dual-Layer**

- » Soft, breathable mesh inner layer and a nylon/spandex blend outer layer
- » Wear both face layers in cold climates or just the mesh when warmer
- » Hinged design

6826

2-Piece Fleece Balaclava

- » 2-pc polyester fleece attached by hook & loops
- » Unique hard hat hook and loop suspensions
- » Reflective accent for higher visibility



6970

Fleece Balaclava w/ Hot Rox™

- » 2-piece fleece, patented design
- » Built-in heat exchanger for warm air inhalation
- » Form-fitting design prevents eyewear from fogging



6832

Spandex Balaclava

- » Polyester/spandex blend
- » Lightweight and stretchable for all-day comfort
- » Easily fits under hard hat or other head protection
- » Long length for added protection
- » Reflective accents for visibility

6827

2-Piece Fleece/Neoprene Balaclava

- » Polyester fleece w/ neoprene mask
- » Reflective accents for high visibility
- » Hook & loop to attach to hard hat suspensions





6824

Wool Blend Balaclava

- » Moisture wicking polyester/ wool blend
- » Easily fits under hard hats
- » Lightweight and stretchable
- » Reflective accent for visibility



NAVY

BLACK

LIME

GRAY

REALTREE®

6823

Wind-Proof Hinged Fleece Balaclava

- » Fleece with wind-protectant fabric
- » Unique hinged design
- » 3-panel construction for comfort
- » Reflective accent for visibility

6822

Balaclava with Spandex Top

- » Polyester fleece for warmth
- » Lightweight, stretchable spandex top
- » Reflective accent for visibility



LIME

BLACK

6821

Fleece Balaclava

- » Polyester fleece for warmth
- » Reflective accents for visibility



Ergodyne N-Ferno 6823 Thermal Fleece Wind-Resistant Hinged Balaclava, Black



arctic roughnecking

By Amazon Customer on Dec 10, 2017

“This is my second year working in North Dakota on workover rigs. This is by far the best mask I’ve worn working derricks. High wind and below-zero temps, this mask was awesome. I keep a spare in my bag at all times.”



// FLAME RESISTANCE

Each year, hundreds of burn injuries and deaths are recorded from workers exposed to open flame, high heat, flash fire or arc flash without proper personal protective equipment (PPE).

Avoid “Single Wash” Solutions

Winter liners that are made of polyester with topical FR treatments are often inaccurately believed or reported to be FR-compliant. The topical treatment does help the liner self-extinguish, but only after the flame source is removed. As long as the flame is present, polyester will do what polyester does: melt, drip and burn.

This treatment is often described as a “single wash”, meaning it will be ineffective after one laundering. **Treated polyester products do not meet any FR garment standard appropriate for ARC flash or flash fire hazards such as ASTM F1506 or NFPA 2112.** If the job calls for workers to wear clothing compliant to any of the FR garment standards, it is critical that they do not wear PPE with a topical FR treatment.

Instead, make sure PPE is made with trusted, compliant materials like Nomex® or modacrylic blends and sewn with flame resistant Nomex® or meta-aramid threads per the appropriate FR performance requirements.



6885

2-Way 2-Layer FR Liner

- » Top: FR modacrylic twill with FR modacrylic fleece
- » Lower: Double layer FR modacrylic rib knit
- » Nomex® metal zipper
- » **NFPA 70E CAT2 // ATPV 17 CAL/CM²**

6847

Dual Compliant Balaclava

- » Meets requirements of ASTM F1506, classified to both NFPA 70E and NFPA 2112 (CAT 2)
- » Power Grid™ fleece provides enhanced thermal capabilities while remaining lightweight and breathable
- » **NFPA 70E CAT2 // ATPV 20 CAL/CM²**



6882

2-Layer FR Modacrylic Liner

- » Shell: 60% modacrylic/40% cotton twill blend
- » Lining: 60% modacrylic/40% cotton fleece blend
- » **NFPA 70E CAT2 // ATPV 20 CAL/CM²**



6892

3-Layer FR Modacrylic Liner

- » Shell: 60% modacrylic/40% cotton twill blend
- » Mid-Layer: 3M™ FR Thinsulate™
- » Lining: 60% modacrylic/40% cotton fleece blend
- » **NFPA 70E CAT3 // ATPV 27 CAL/CM²**



6828

FR Modacrylic Balaclava

- » FR modacrylic blend fleece
- » Arc-rated; ATPV of 10.6 cal/cm²
- » Reflective accent for visibility
- » EN 1149 (Anti-Static)
- » **NFPA 70E CAT2 // ATPV 10.6 CAL/CM²**

6962

FR Dual Compliant Neck Gaiter

- » Meets requirements of ASTM F1506, classified to both NFPA 70E and NFPA 2112 (CAT 2)
- » Polartec® FR Power Grid™ fleece is breathable and lightweight
- » **NFPA 70E CAT2 // ATPV 20 CAL/CM²**



6820

FR Modacrylic Knit Cap

- » Shell: 60% modacrylic/40% cotton blend
- » Lining: 60% modacrylic/40% cotton fleece blend
- » Reflective accent for visibility
- » **NFPA 70E CAT4 // ATPV 49.5 CAL/CM²**



// WARMING ACCESSORIES

Whether in liners, boots or gloves, warming packs come in handy whenever you need to keep fingers and toes from freezing. And, for those frequently abandoning gloves to perform high-dexterity tasks, hand warmer muffs provide a much needed relief from the chill.



6990

Hand Warming Packs

- » Natural contents heat up on contact with oxygen
- » Seal in zip-top bag to reuse
- » Heats up to 12 hours

6992

Toe Warming Packs

- » Natural contents heat up on contact with oxygen
- » Seal in zip-top bag to reuse
- » Heats up to 6 hours



6980

Winter Hand Warmer Muff

- » Durable windproof and water-resistant outer shell
- » Warm, polyester fleece lining
- » Neoprene cuffs keep heat in and cold out
- » Interior hand warming pack pockets
- » Sold as single muff or muff + warming packs kit



6995

Foot Warming Packs

- » Natural contents heat up on contact with oxygen
- » Seal in zip-top bag to reuse
- » Heats up to 6 hours



6980 Kit

Winter Hand Warmer Muff Kit

- » Includes muff + 5 pairs of hand warmers



// TRACTION

Slips, trips and falls are the second most common cause of accidental death in the U.S. every year. And even deeply lugged soles—which work great in mud, snow, gravel, etc.—may be inadequate for ice. Wearing some type of personal ice traction device may be a better option. While versions of anti-slip devices have been available for generations, designs and materials have improved.

Spikeless

While cleats are an obvious traction choice, they can be damaging to floors, vehicles and equipment. Innovative spikeless technologies enable workers to seamlessly transition from indoors to outdoors while maintaining grip on slick surfaces.

Carbon Steel Cleats

Ice traction devices with carbon steel studs can provide solid traction on ice and snow-covered surfaces. Heat treating the carbon steel hardens the compound, making it even more durable on rough terrain.

Tungsten Carbide Cleats

Made from a durable, exceptionally hard compound, tungsten carbide studs wear up to 100 times longer than steel and can be made thinner than heat-treated carbon steel, allowing for better penetration and sharper grip on ice and snow.

Heel-Only Cleats

Great for workers that regularly climb ladders or operate pedals in vehicles or equipment where studs or spikes across the middle of the foot could interfere or cause discomfort.

Easy On/Off

Look for cleats with a one-piece design that stretch right over existing footwear. Modern thermoplastic elastomers (TPE) are both durable and tested for cold weather use.





MICHELIN

6325

Spikeless Traction Device

- » Spikeless traction device powered by Michelin® soles
- » Transition from outdoors to indoors without scratching floors or other surfaces
- » U.S.: M (5-8), L (8-11), XL (11-14)

6310

Adjustable One-Piece Ice Traction

- » 10 rugged, heat-treated carbon steel studs
- » Adjustable cord for a secure fit
- » Stretchable rubber for fit and easy on/off
- » U.S.: M (5-8), L (8-11), XL (11-14)



6300

One-Piece Ice Traction

- » 8 rugged, heat-treated carbon steel studs
- » Stretchable rubber for fit and easy on/off
- » U.S.: M (5-8), L (8-11), XL (11-15), 2XL (15-18)



6315

Strap-On Heel Ice Traction

- » Corrosion-resistant steel heel plate
- » Heel-only design leaves mid-foot free
- » Rugged webbing, hook & loop strap
- » U.S.: M/L (7-11), XL+ (11-14)



6300TC

Tungsten Carbide Ice Traction

- » 8 rugged, durable tungsten carbide steel studs
- » Stretchable rubber for fit and easy on/off
- » U.S.: M (5-8), L (8-11), XL (11-15), 2XL (15-18)

6301

Replacement Studs

- » 8 heat-treated carbon steel replacement studs
- » Fits Trex™ 6300, 6304, and 6310



6304

Performance One-Piece Ice Traction

- » 12 rugged, heat-treated carbon steel studs
- » Stretchable rubber with "step-in" design
- » U.S.: S (5-7), M (7-9), L (9-11), XL (11-14)



6301TC

Replacement Studs

- » 8 tungsten carbide replacement studs
- » Fits Trex™ 6300TC

// HYDRATION

Because hydration is at the core of your body's regulatory functions, it's key to health and performance in cold environments. But that's where it gets tricky. The risk of dehydration may increase when working in cold conditions because lower temperatures suppress thirst even when the body requires fluids, and thirst is not a great indicator of hydration levels to begin with (urine color is, however—aim for a clear stream!).

In short, people tend to drink less in cold weather, which puts them at greater risk for cold related injury and illness. Proper hydration has a host of health benefits, and the more workers can remember to do it, the better they'll be able to function.

Here are a few handy hydration tips:

- » Keep water handy and drink from it throughout the day. Continuous sipping of fluids is better than infrequent chugging!
- » Enhance water intake with an electrolyte solution, sports drink or salty snack.
- » Drink water before, during and after a shift.
- » To make drinking water a habit, start and end each day with a glass.

The use of hydration packs is a good way to encourage more intake of fluids. Because they make their next drink so readily available and hands-free simple, workers can hydrate without missing a step or having to go searching for their water bottle or tumbler.





- 5157**
3L Premium Cargo Hydration Pack
- » 600D rip-stop polyester
 - » 8mm foam padded straps
 - » 4 zippered compartments
 - » Breakaway straps for safety
 - » 100% anti-microbial valve

- 5151**
DualCap Water Bottle
- » DualCap opening, wide mouth for ice + filling w/ smaller drink spout
 - » 1000ml, tritan BPA free copolyester
 - » Fits in most cup holders



- 5156**
3L Premium Low-Profile Hydration Pack
- » 600D rip-stop polyester
 - » 8mm foam padded straps
 - » 1 zippered compartment
 - » Breakaway straps for safety
 - » 100% anti-microbial valve



- 5152**
DualCap Insulated Water Bottle
- » DualCap opening, wide mouth for ice+filling w/ smaller drink spout
 - » 750ml, stainless steel, keeps drinks cold for 24 hours and hot for 12 hours
 - » Fits in most cup holders



- 5155 // 5155HV**
2L Low-Profile Hydration Pack
- » 600D rip-stop polyester
 - » Breakaway straps for safety
 - » 100% anti-microbial valve

- 5170**
Industrial Hard Sided Cooler - 17 Quart
- » 17-quart (16.1 L) main compartment measures 12in x 16.2in x 12in
 - » Keeps cool up to 41°F // 5°C for 30 hours
 - » Can be utilized as a stool, holds up to 300 lbs // 136.1 kg



- 5159**
Hydration Pack Bladder Cleaning Kit
- » Compatible with any Chill-Its® bladder
 - » Includes:
 - Drying rack
 - Bladder cleaning brush
 - Delivery system cleaning brush
 - Bite valve cleaning brush



- 5171**
Industrial Hard Sided Cooler - 48 Quart
- » 8-quart (45 L) main compartment can hold 72 cans or 40 water bottles
 - » Keeps cool up to 41°F // 5°C for 30 hours
 - » Can be utilized as a stool, holds up to 300 lbs // 136.1 kg



// SKIN PROTECTION

Summer isn't the only time to get serious about sunscreen. Not only is the sun not cold weather-averse, it's highly reflective on snowy surfaces. And when UVA and UVB rays come in contact with skin cells, bad things can happen. Bad things like wrinkles, skin damage and most concerning—skin cancer. To make matters worse, the likelihood of developing skin cancer for those who work outdoors is 3.5 times higher than for those who do not. The sun damage risk on worksites is so high OSHA has identified UV as a carcinogen. Now for the good news. While skin cancer is the most common type of cancer, it's also the most preventable. Regular application of SPF 50 sunscreen on exposed areas can block 98% of sunburn-causing UV rays. And with so many application styles available, there's really no excuse to skip it.

KREW'D

Available in multiple capacities and formulations to fit a variety of sun protection needs, every product in the KREW'D® series contains a sweat and water-resistant sport formula for even coverage and better protection. It's lightweight, non-greasy, absorbs quickly and is free of paraben/phthalates and octinoxate/oxybenzone.





6351

8oz Sunscreen Lotion

- » SPF 50 broad spectrum, UVA/UVB protection
- » Lightweight, non-greasy lotion formula
- » Water & sweat-resistant up to 80 minutes
- » Handy 8oz squeeze container easily stores in bag or vehicle

6354

1.5oz Sunscreen Stick

- » SPF 50 broad spectrum, UVA/UVB protection
- » Lightweight, non-greasy lotion formula
- » Water & sweat-resistant up to 80 minutes
- » Solid, roll-on stick for easy application & storage
- » Sold as single unit, cases of 12 or 12-pack with display



6352

1.5oz Sunscreen Lotion

- » SPF 50 broad spectrum, UVA/UVB protection
- » Lightweight, non-greasy lotion formula
- » Water & sweat-resistant up to 80 minutes
- » 1.5oz squeeze container with option to attach to belt loop for all-day access
- » Sold in cases of 12 or 12-pack with display



6355

32oz Sunscreen Lotion

- » SPF 50 broad spectrum, UVA/UVB protection
- » Lightweight, non-greasy lotion formula
- » Water & sweat-resistant up to 80 minutes
- » 32oz container with pump for fast & easy application



6353

5.5oz Sunscreen Spray

- » SPF 50 broad spectrum, UVA/UVB protection
- » Lightweight, non-greasy lotion formula
- » Water & sweat-resistant up to 80 minutes
- » Twist n' lock 5.5oz spray can for fast & easy application





TENACIOUS SINCE 1983.

INTERGALACTIC HEADQUARTERS:

44° 58' 18.31" N 93° 09' 12.88" W ALT. 934 FT.

1021 BANDANA BOULEVARD EAST SUITE 220 SAINT PAUL, MN, USA 55108

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