



COLD STRESS HANDBOOK



SOLUTIONS, SUPPORT AND OUR COMPLETE COLD STRESS LINE-UP



WINTER IS WORK. DRESS ACCORDINGLY.

Shoveling, scraping, salting, chipping, trudging... and then your shift starts. Winter is work. Dress accordingly with industrial-grade gear designed and tested in the Great Frozen North (St. Paul, Minne-snow-ta).

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GO ONLINE FOR
UP-TO-THE-NANOSECOND
UPDATES ON OUR
COLD STRESS COLLECTION!

BETTER LIVING THROUGH LAYERING

Plot twist! The #1 challenge for winter workers is overheating.

Your winter jacket might be rated for Neptune (average temp -373°F) but if it's not part of a smart adaptable layering system, you're in for a sweaty spiral of winter regret when the work heats up (moisture is the mortal enemy of cold weather comfort).

Optimal winter work comfort is built around the ability to adapt to workloads and Mother Nature's many moods.



BUILDING A
COLD WEATHER
LAYERING
SYSTEM



40°F OR -40°F...
Build a layering system to
match your flavor of frosty.



OUTER LAYERS

Durable, breathable layer made to stand up to tough use and provide added warmth.



MID LAYERS

Traps body heat + allows workers to remove or add layers as needed.



BASE LAYERS

Starting with a moisture-wicking, quick-drying layer is key.

TEMPERATURE RATINGS

Dallas to Detroit. Windchill to walk-in. Everyone's idea of cold is a unique little snowflake. That's why our thermal jackets and bibs are third-party tested for temp-rated confidence in the cold—no matter how you define it.



UNPACK
TEMPERATURE
RATINGS IN
THERMAL GEAR

WARM
(above 0°F)

BUILT FOR: Mild-to-moderate cold environments and active work

IDEAL FOR: Indoor/outdoor transitions, moderate climates, active jobs



WARMER
(-19°F to 0°F)

BUILT FOR: Frigid temps and long shifts in the cold

IDEAL FOR: Construction sites, delivery crews, loading docks



WARMEST
(-20°F to -60°F)

BUILT FOR: The last line of defense in sub-zero hellscape

IDEAL FOR: Cold storage, arctic jobs, long-duration exposure



RATED TO
-°F
(-°C)

The truth is, temperature ratings are merely a performance guide, not gospel—the best direction available through exhaustive testing and consideration of three major factors:

Insulation (CLO Value) +
Activity (MET Level) +
Time (Duration)

1

INSULATION
CLO Value

Insulation performance is measured by CLO rating.

WHAT IS CLO VALUE?

Degree of insulation provided by an article of clothing. The higher the CLO, the warmer it is.

2

ACTIVITY
MET Level

When you're moving, you're creating heat.

WHAT IS MET LEVEL?

(M)etabolic (E)quivalent of (T)ask is the ratio of your working metabolic rate relative to your resting rate.

3

TIME
Duration

How long are you in the cold?

WHAT IS DURATION?

Continuous time spent in the cold.

TEMP-RATED GEAR FOR WHATEVER YOU CALL COLD

WARM
(above 0°F)



WARMER
(-19°F to 0°F)



WARMEST
(-20°F to -60°F)



LEARN MORE AT [ERGODYNE.COM/WARMING](https://www.ergodyne.com/warming)

[ergodyne.com](https://www.ergodyne.com) 800 225-8238

COLD STRESS:

THERMAL CLOTHING

Thermal gear so rugged that weather patterns redirect themselves out of sheer respect. But on the inside?
Warmer than a teddy bear hug.



ADJUSTABLE
HEAT



UP TO 9 HOURS
OF RUN TIME



RECHARGEABLE
TAKES 4 HOURS TO
FULLY CHARGE

★★★★★
“EXCELLENT
HEATED VEST!!”

“Fits comfortable under winter jacket
and gear. Features 3 heat settings
ideal to adapt to different cold
conditions. The snug fit helps to keep
you warm. Overall great product!!”

- 6495 Online Review

6495 // 6495B

RECHARGEABLE HEATED VEST W/ BATTERY
POWER BANK - 7.2V/5000MAH // BATTERY
POWER BANK REPLACEMENT
SIZING: S-4XL

BASE LAYERS



6435

MIDWEIGHT BASE LAYER
LONG SLEEVE SHIRT

SIZING: S-5XL



6480

MIDWEIGHT BASE LAYER PANTS

SIZING: S-5XL



6436

LIGHTWEIGHT BASE LAYER
LONG SLEEVE SHIRT

SIZING: M-2XL



6481

LIGHTWEIGHT BASE LAYER PANTS

SIZING: M-3XL

JACKETS



6466

WINTER WORK JACKET -
HEAVY-DUTY 500D NYLON SHELL

SIZING: S-4XL



6467

WINTER WORK JACKET -
300D POLYESTER SHELL

SIZING: S-4XL



6468

HEAVY-DUTY DUCK CANVAS WORK JACKET
- SHERPA LINED, WATER RESISTANT

SIZING: S-4XL

BIBS



6471

INSULATED BIB OVERALLS -
HEAVY-DUTY 500D NYLON SHELL

SIZING: S-4XL



6472

INSULATED BIB OVERALLS -
300D OXFORD SHELL

SIZING: S-4XL

NEED ANSI/ISEA 107
CERTIFIED PROTECTION?
CHECK OUT OUR LINE OF
HI-VIS GEAR HERE



COLD STRESS:

COLD STORAGE GEAR

In the never-ending winter known as your workday, cold-related illnesses, injuries and mishaps are as relentless as your alarm clock on a Monday morning. But with the right mix of planning, regular breaks to warm up and the proper gear, you'll be livin' the sub-z dream, baby.

ANSI/ISEA 105



850
INSULATED FREEZER GLOVES
SIZING: 2XS-3XL

SILICONE PATTERNED PALM + FINGERS FOR SECURE GRIP



★★★★★
"ABSOLUTELY LOVE THESE GLOVES"

"I work in food distribution as a selector in the freezer and spend a lot of time in below zero temps. The grip is great and the touchscreen works amazing with my gear. Highly recommend if you work in temps below zero and need finger dexterity."

- 850 Online Review

CHILLER



FOREARM GRIPS FOR MORE LIFTING LEVERAGE!

6474
INSULATED COOLER JACKET
SIZING: XS-5XL



SILICONE GRIP!

7402
THERMAL KNIT COOLER GLOVES
SIZING: XS-2XL



DEEP FREEZE



6464
AMPLIFIRE™ FREEZER JACKET
SIZING: XS-5XL

FREEZER



6475
INSULATED FREEZER COVERALLS
SIZING: XS-5XL



6476
INSULATED FREEZER JACKET
SIZING: XS-5XL



6477
INSULATED FREEZER BIB OVERALLS
SIZING: XS-5XL



6478
HI-VIS INSULATED FREEZER JACKET, TYPE R CLASS 2
SIZING: XS-5XL



6479
HI-VIS INSULATED FREEZER BIB OVERALLS, CLASS E
SIZING: XS-5XL



6461 // 6462
ESSENTIAL INSULATED FREEZER JACKET // BIB OVERALLS
SIZING: XS-5XL



SCAN FOR COLD STORAGE SAFETY BASICS, RISKS AND PRACTICES

COLD STRESS:

THERMAL HARD HAT LINERS

When you're in the realm of sub-arctic temperatures, thermal liners help winterize your brain bucket with a beggar's banquet of BTUs.

FIND THE SILVER LINING IN EVERY WORKDAY

with **ampliFIRE™** Heat Reflective Technology

Not every day is a good day. But thanks to ampliFIRE™ heat reflective technology, every day is a warm day. Designed to amp up your body heat by capturing, reflecting and trapping what you create, it's the cozy silver lining in your coldest, cruelest shifts.



6835
THERMAL HARD HAT LINER
WITH AMPLIFIRE™



6840 // 6842
WINTER HARD HAT LINER - 2-LAYER,
FLEECE-LINED, POLYESTER SHELL,
CHIN-LENGTH // SHOULDER LENGTH



6850 // 6852 // 6871
WINTER HARD HAT LINER - 2-LAYER,
FLEECE-LINED, COTTON SHELL, CHIN-
LENGTH // SHOULDER LENGTH //
MOUTHPIECE KIT



6848 // 6849
WINTER HARD HAT LINER - COTTON
+ FLEECE, CHIN-LENGTH //
SHOULDER LENGTH



6860 // 6862
WINTER HARD HAT LINER - 2-LAYER,
FLEECE-LINED, FR SHELL,
CHIN-LENGTH // SHOULDER LENGTH



6851
THERMAL HARD HAT LINER -
FLEECE



6877
WINTER HARD HAT LINER - 3-LAYER,
FLEECE-LINED, FOAM MID-LAYER,
FR SHELL, SHOULDER LENGTH



6885
FR WINTER HARD HAT LINER
- 2-LAYER, ZIP-OFF CAP,
MODACRYLIC/COTTON



6892
FR WINTER HARD HAT LINER -
3-LAYER, MODACRYLIC/COTTON,
SHOULDER LENGTH



6952
WINTER HARD HAT LINER -
3-LAYER, SHERPA-LINED, QUILTED
SHELL, SHOULDER LENGTH



6867 // 6878
WINTER HARD HAT LINER - 3-LAYER,
FLEECE-LINED, FOAM MID-LAYER,
QUILTED SHELL, SHOULDER LENGTH //
MOUTHPIECE KIT



6882 // 6876
FR WINTER HARD HAT LINER - 2-LAYER,
MODACRYLIC/COTTON, SHOULDER
LENGTH // MOUTHPIECE KIT



6870 // 6872 // 6874
THERMAL MOUTHPIECE

COLD STRESS:

THERMAL BALACLAVAS

Worn alone or under head protection, our best-selling selection of high tech, heat-trapping balaclavas is a must for warm-blooded creatures looking to thumb their collective nose at old Jack Frost.



6829
RIB KNIT 2-LAYER
BALACLAVA FACE MASK



6847
FR BALACLAVA FACE MASK -
DUAL COMPLIANT

Scan for more on arc flash
and flash fire standards

FR **NFPA 70E CAT 2**
NFPA 2112

**ANALYSIS
PARALYSIS?**

Here's a quick-glance guide to
finding the right fit, features
and freeze-fighting warmth
you need for the job.



6832
BALACLAVA FACE MASK - SPANDEX



6844
DUAL-LAYER BALACLAVA
FACE MASK



6822
BALACLAVA FACE MASK -
SPANDEX TOP



6821
BALACLAVA FACE MASK - FLEECE



6821-ECO
RECYCLED FLEECE
BALACLAVA FACE MASK



6893Z // ZI
ZIPPERED BALACLAVA FACE MASK
// BUMP CAP INSERT KIT



6831
REFLECTIVE BALACLAVA FACE
MASK - 3-IN-1, POLYESTER



6823
HINGED BALACLAVA
FACE MASK



6827
BALACLAVA FACE MASK -
2-PIECE, FLEECE/NEOPRENE



6826
BALACLAVA FACE MASK -
2-PIECE, FLEECE



6828
FR BALACLAVA FACE MASK -
MODACRYLIC BLEND, FR FLEECE



6970
EXTREME BALACLAVA FACE
MASK - HOT ROX

COLD STRESS:

THERMAL HATS

Avoid cold bodies, cold brains, deteriorating performance and disoriented decision-making with thermal headwear. Designed to go beyond the core to protect skin and extremities most vulnerable to frostbite.



6806
CUFFED RIB KNIT WINTER HAT



6812
RIB KNIT WINTER HAT



6803
REFLECTIVE RIB KNIT WINTER HAT



6802
TRAPPER HAT
SIZING: XS, S/M, L/XL



6818
KNIT WINTER HAT - FLEECE LINED,
3M™ THINSULATE™



6813
WINTER SKULL CAP HELMET LINER



6817
FR HARD HAT WINTER SKULL CAP



6820
FR KNIT WINTER HAT -
MODACRYLIC COTTON/FLEECE



6803ZI
REFLECTIVE RIB KNIT
WINTER HAT AND BUMP CAP INSERT



6808ZI
ZIPPERED WINTER BEANIE HAT AND
BUMP CAP INSERT



6802Z // ZI
ZIPPERED TRAPPER HAT //
BUMP CAP KIT
SIZING: S/M & L/XL



6811Z // ZI
ZIPPERED RIB KNIT BEANIE
HAT // BUMP CAP KIT

COLD STRESS:

THERMAL GLOVES

The 10th circle of Hell? Juggling machine screws in sub-zero windchill. Our Thermal Gloves combine dexterity, flexible grip and cozy insulation with weather-resistant protection built for bitter cold and wet conditions. And with touchscreen-capable fingertips, you can swipe, tap and keep working without frostbite fright. Stay toasty, my friends.



FLEXIBLE, BREATHABLE
TRIHEX™ TPR SHIELDS
FROM IMPACT



7521
THERMAL WATERPROOF
IMPACT GLOVES
SIZING: XS-3XL



ANSI/ISEA 105
A2
3 3
ANSI / ISEA 138
1
EN388
2131 X

7401
THERMAL COATED
LIGHTWEIGHT WINTER GLOVES
SIZING: M-2XL



EN388
2131 X



817
THERMAL REINFORCED PALMS
WINTER WORK GLOVES
SIZING: S-2XL

EN388
3423 X



825WP
THERMAL WATERPROOF
WINTER WORK GLOVES
SIZING: S-2XL



7501
THERMAL COATED
WATERPROOF GLOVES
SIZING: S-2XL

ANSI/ISEA 105-2016
A2
4 2
EN388
2131 X



817WP
THERMAL WATERPROOF REINFORCED
PALMS WINTER WORK GLOVES
SIZING: S-2XL

EN388
3423 X



851WP
INSULATED IMPACT-RESISTANT
THERMAL GLOVES
SIZING: 2XS-3XL

ANSI / ISEA 138
3
ANSI/ISEA 105
A2
6 4



7551
COATED CUT-RESISTANT
WATERPROOF WINTER WORK GLOVES
SIZING: S-2XL

ANSI/ISEA 105-2016
A5
4 4
EN388
3X43E



818WP
THERMAL WATERPROOF
WINTER WORK GLOVES
SIZING: S-2XL

EN388
3423 X



852WP
INSULATED THERMAL GLOVES
SIZING: S-2XL



EN388
3423 X



816
THERMAL HALF FINGER FLIP-TOP
WINTER WORK GLOVES
SIZING: S-2XL

EN388
2231 X



819WP
EXTREME THERMAL WATERPROOF
WINTER WORK GLOVES
SIZING: S-2XL

EN388
4222B



COLD STRESS:

THERMAL HEADBANDS GAITERS + ACCESSORIES

When you can't seem to keep the fire stoked, these little extras are like tossing another log on the embers to keep things nice and toasty.

BRACE YOURSELF,
WINTER.

We're Coming Prepared

Ready and waiting in backseats and truck beds, the Winter Warming Kit is packed to attack the season's worst-case scenarios with industrial-grade gear.

★★★★★

"Good as Carhartt if not better"

- 6306 Online Review

6981

WINTER WARMING KIT

7401

X1
PAIR

★★★★★

"Grippy as Hell...
easy to hold onto tools"

- 7401 Online Review

6806

X1
HAT

6494

X1
PAIR



6994

★★★★★

"With my steel toe boots,
it's a game changer"

- 6992 Online Review



6980

WINTER HAND
WARMER MUFF



6887

2-LAYER WINTER HEADBAND -
FLEECE, SPANDEX



6810

HARD HAT TUBE LINER



6815

HARD HAT TUBE LINER - FULL FACE



6491

REVERSIBLE THERMAL MULTI-BAND
- FLEECE INTERIOR, POLYESTER
EXTERIOR



6960

FLEECE NECK GAITER



6961

REFLECTIVE WINTER NECK GAITER



6962

FR HARD HAT WINTER SKULL CAP



6494

THERMAL FREEZER SOCKS

SIZING: S/M & L/XL

WARMING PACKS



6990

HAND WARMING PACKS



6992

TOE WARMING PACKS



6995

FOOT WARMING PACKS



6994

ASSORTED WARMING PACK



6997

BODY WARMING PACKS

COLD STRESS:

TRACTION DEVICES

Your boots may be made for walking, but that doesn't mean they can get you over the hump. Take a walk on the wild side and put slippery conditions on their heels with a sure-footed assist from TREX Traction.

MICHELIN TIRES FOR YOUR FEET? YUP. IT'S A THING.

Soup-up your outsoles with the same tire tech that keeps sports cars glued to the road.



6325
SPIKELESS TRACTION DEVICES -
WINTER CONDITIONS
SIZING: S-2XL



6326
SPIKELESS TRACTION DEVICES -
SLIP-RESISTANT & OIL-RESISTANT
SIZING: S-XL



TREAD PATTERN
Provides constant contact
with slippery surfaces

SCULPTURE DESIGN
Provides adherence and adaptability
on various ground conditions



TREAD DESIGN
"Block sipings" create additional
tread surface area for increased
grip on snowy surfaces.

PRESSURE DISTRIBUTION
Micro-pumps increase
adhesion on icy surfaces.

GROOVE DESIGN
Strategically placed grooves allow
for water evacuation when pressure
is applied on wet surfaces.



6300 // 6300TC
SLIP-ON ICE CLEATS // TUNGSTEN
CARBIDE
SIZING: M-2XL



6316
MID-SOLE ICE CLEATS - FLAT SOLE



6304
STEP-IN ICE CLEATS - FULL
COVERAGE
SIZING: S-XL



6317
MID-SOLE ICE CLEATS - FLAT SOLE



6306
ICE TRACTION CLEATS
SIZING: S-XL



6315
STRAP-ON HEEL ICE CLEATS
SIZING: M/L & XL



6310
ADJUSTABLE SLIP-ON ICE CLEATS
SIZING: M-XL



6301 // 6301TC
REPLACEMENT SPIKES //
TUNGSTEN CARBIDE

CHOOSE THE TRACTION FOR YOUR APPLICATION

OUR

INDOORS

Get a grip on greasy, wet, slick indoor surfaces

OUTDOORS

Tundra-chewing spikes to dig into sheer ice and snow pack

INDOORS & OUTDOORS

Like winter tires for your feet, keep ‘em on indoors without damaging floors

	6326	6300, 6300TC, 6304, 6306, 6310	6315, 6316, 6317	6325
Spikes		●	●	
Slush		●	●	●
Ice		●	●	●
Snow		●	●	●
Oil	●			
Grease	●			
Water	●			●
Driving	●		●	●
Ladders	●		●	●

ANALYSIS PARALYSIS?

Here's a quick-glance guide to traction that grips, bites and keeps you upright when the jobsite turns slick.





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

PHONE 651 642 9889 // 800 225 8238

ERGODYNE.COM

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ergodyne®

THINK WARM THOUGHTS