

PUBLIC WORKS, UTILITY, & LINEMEN

VERTEX OUTFITTERS
GO WHERE OTHERS WON'T

WELCOME

BUILT FOR THE CREWS WHO KEEP IT RUNNING.

Water mains break at 2 a.m. Lift stations fail in storms. Vaults and manholes need someone to go in and come back out. This catalog covers the confined-space entry and retrieval systems, ventilation, lighting and crew protection Vertex Outfitters carries for municipal public works, water and wastewater utilities, electric utilities, linemen and ground crews.

Each section opens with a practical guide: which system fits which opening, what comes in the box and what to order with it, and what to check before you buy.

Need help putting a system together or outfitting a whole crew? Email **info@vertexoutfitters.net** or call **301-246-2336**.

HOW TO READ A PRODUCT

HEIGHT **7 FT** — Spec tiles show the key numbers for each product: height, capacity, airflow, lumens or rating.

IN — Green = what ships in the box. Orange = parts you order separately to make a working system.

V0- — Item numbers are Vertex SKUs. Search any of them on vertexoutfitters.net.

SDVOSB **Service-Disabled Veteran-Owned**	MD VSBE **#89150**
UEI **WVWHBNHDUTW6**	CAGE **16MC9**

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ENTRY · RETRIEVAL · RESCUE

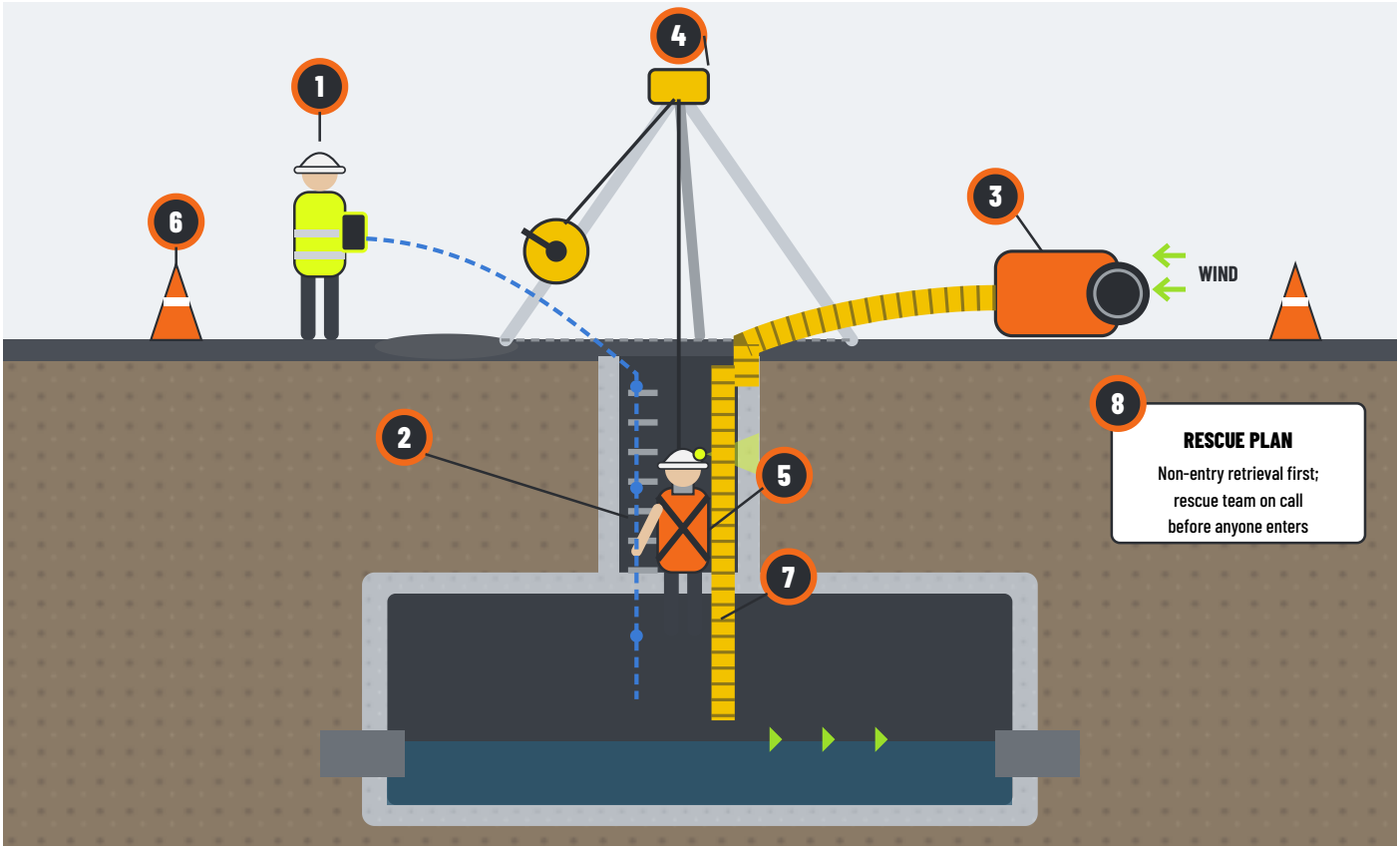
CONFINED SPACE

Manholes, vaults, wet wells, lift stations and tanks. We carry complete tripod systems, davits with portable and permanent bases, personnel winches, rescue-rated SRLs, harnesses and the rescue gear that goes with them — matched so the parts work together.

FrenchCreek | 3M DBI-SALA | KONG | PMI | Singing Rock | Junkin | Elk River

ANATOMY OF A SAFE ENTRY // PERMIT SPACE

Eight things that should be in place before anyone goes below grade. The rest of this section is the equipment that covers each one.



1 ENTRY SUPERVISOR & ATTENDANT
The attendant stays outside the space for the entire entry, keeps count and contact, and never enters to attempt a rescue.

2 TEST THE AIR
Test oxygen, flammables and toxics (H_2S, CO) before entry, and at top, middle and bottom. Keep monitoring while people are inside.

3 VENTILATE
Set the blower upwind and away from engine exhaust. Duct fresh air down to the work zone and keep it running.

4 RETRIEVAL SYSTEM
OSHA 1910.146(k)(3)(ii) calls for a mechanical retrieval device for vertical permit spaces more than 5 ft deep. A tripod or davit with a 3-way rescue SRL or winch does this.

5 HARNESS & RETRIEVAL LINE
Full-body harness with the line at the back near shoulder level or above the head — or wristlets where a harness can't be used.

6 GUARD THE OPENING & THE STREET
Barrier, guard rail or the system itself around the opening, plus traffic control for the work zone.

7 HANDS-FREE LIGHT
Headlamp or right-angle light for the entrant. Use intrinsically safe lighting wherever a flammable atmosphere is possible.

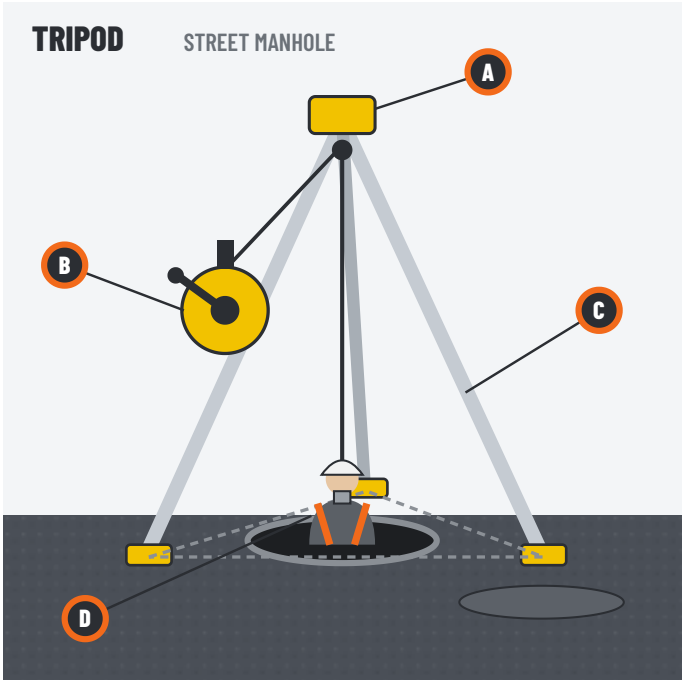
8 RESCUE PLAN
Know how you will get a worker out — non-entry retrieval first — before anyone goes in.

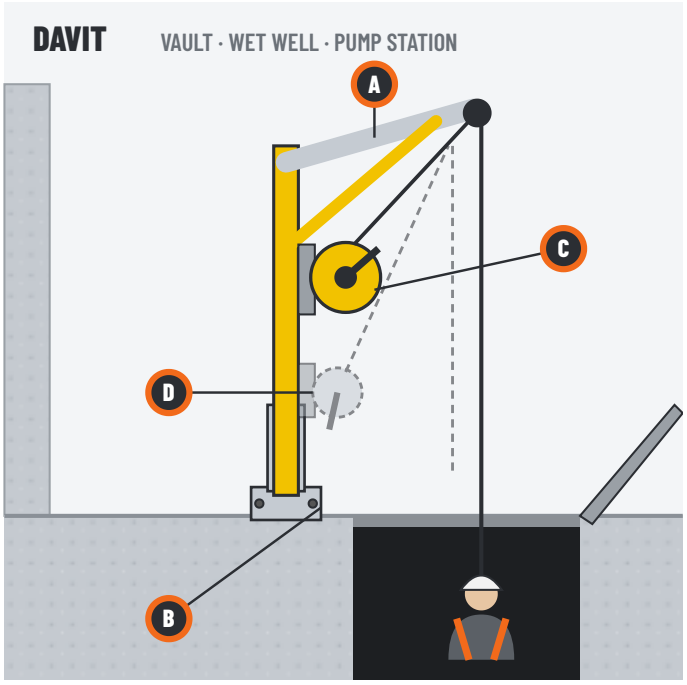
IS IT A PERMIT-REQUIRED CONFINED SPACE?

Under OSHA 1910.146, a confined space is large enough to enter, has limited means of entry or exit, and is not designed for continuous occupancy. It becomes a **permit-required** space if it has — or could have — a hazardous atmosphere, an engulfment hazard, walls that converge or a floor that slopes to a smaller cross-section, or any other serious safety or health hazard. Most sanitary manholes, wet wells and valve vaults qualify. *General guidance only — follow OSHA 1910.146 (or 1926 Subpart AA), your permit program and each manufacturer's instructions.*

TRIPOD OR DAVIT? // PICK BY THE OPENING

Both lower and raise a worker on a rescue SRL. Which one fits depends on the ground around the opening. Shown with FrenchCreek components Vertex carries.







TRIPOD // FRENCHCREEK S50G-7

Best where: Round street manholes and open vaults with flat ground all the way around. Sets up anywhere — nothing to install.

INCLUDED **A** TP7 7 ft aluminum tripod, head with 2 lifeline points · **B** R50G 50 ft 3-way rescue SRL with bracket, pulley and carabiner · **C** telescoping legs with rubber feet

ORDER SEPARATELY **D** Full-body harness or wristlets · 206 carry bag. Want a materials line too? Order the S50G-M7 (adds the MW50G winch) or R50G-TP7 (adds a bag).

Watch for: All three legs need solid footing around the opening. A tripod can't straddle an opening tight against a wall, pump or pipe.



DAVIT // FRENCHCREEK PD SERIES

Best where: Vaults, wet wells and pump-station hatches next to walls or equipment. The boom reaches over the opening from one side. A permanent sleeve pays off at sites you enter on a schedule.

BUILD IT FROM **A** PD1 davit mast (12–30 in reach) · **B** one base: PD2 portable, PD5 core-hole, PD7 floor or PD8 wall sleeve · **C** PD3 bracket + R50G rescue SRL

OPTIONAL **D** PD4 bracket + MW50G work winch for tools and materials (never for people) · harness or wristlets.

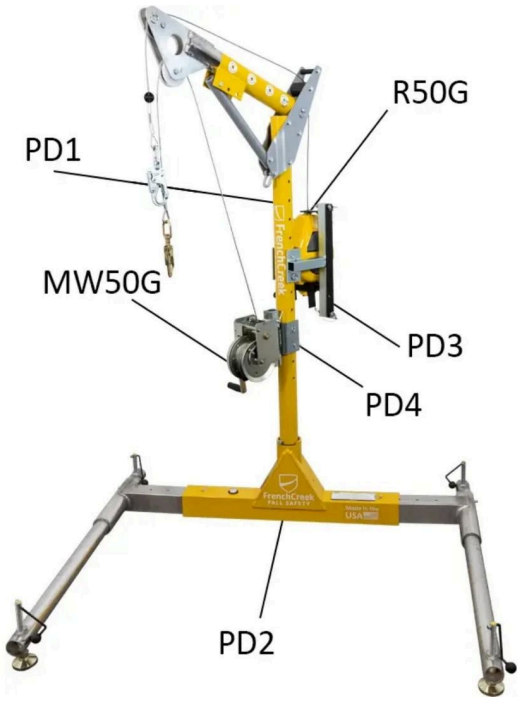
Watch for: Permanent sleeves are rated 450 lb at 2:1 and must be anchored into sound concrete or steel per FrenchCreek instructions. The PD2 base footprint is 36–60 in.

CHECK BEFORE YOU ORDER

- Measure the opening and the clear space around it — tripod legs need room on every side; a davit needs one solid side.
- Confirm the depth: the 50 ft SRLs cover most manholes and vaults; choose 100 ft (R100T, FCP2005-100) for deep wet wells and shafts.
- Cable: galvanized for general use, stainless for wastewater and corrosive spaces, Technora rope to save weight.
- Every system here ships without a harness. Add one with shoulder or dorsal retrieval points — or wristlets.

BUILD A DAVIT SYSTEM // ONE MAST, MANY SITES

Buy one PD1 mast and SRL per truck, then set a low-cost sleeve at each vault or lift station you enter. The mast drops into whichever base is waiting there.



PD1 — PD1 DAVIT MAST
Adjustable 12–30 in reach with primary and secondary pulleys. Swivels away from the opening for loading.

MW50G — MW50G WORK WINCH
Mounted on PD4. Raises and lowers tools, pumps and buckets. 350 lb. Not for people.

R50G — R50G RESCUE SRL
Mounted on PD3. Fall arrest while the worker climbs; crank-up retrieval if they can't.

PD3 — PD3 BRACKET
Locks the R50G to the mast.

PD4 — PD4 BRACKET
Locks the MW50G to the mast.

PD2 — PD2 PORTABLE BASE
3-piece base, 36–60 in. Swap it for a PD5, PD7 or PD8 sleeve at a permanent site.

Manufacturer photo: FrenchCreek PD1 mast on a PD2 base with an R50G on a PD3 bracket and an MW50G on a PD4 bracket.



PD2 PORTABLE BASE
3-piece base adjusts 36–60 in with a bullseye level. 71 lb. For openings that move from job to job.

VO-FC-PD2



PD3 SRL BRACKET
Mounts the R50G rescue SRL to the PD1 mast. Locking pins. 15 lb.

VO-FC-PD3



PD4 WINCH BRACKET
Mounts the MW50G work winch to the PD1 mast. 15 lb.

VO-FC-PD4



PD5 CORE MOUNT SLEEVE
Slips into a 4 in core hole in concrete or steel. 9 in sleeve, 360° rotation. 450 lb at 2:1.

VO-FC-PD5



PD7 FLOOR MOUNT SLEEVE
Bolts to steel or concrete beside a vault, wet well or pump-station hatch. 450 lb at 2:1. 32 lb.

VO-FC-PD7



PD8 WALL MOUNT SLEEVE
Bolts to a wall next to the opening; user-supplied fasteners. 450 lb at 2:1.

VO-FC-PD8



PD1 DAVIT MAST
12–30 in adjustable reach; primary and secondary pulleys; swivels away from the opening. 42 lb. Mast only.

VO-FC-PD1

WHICH BASE?
PD2 — moves job to job.
PD5 — drill a 4 in core hole.
PD7 — bolt to a slab beside the hatch.
PD8 — bolt to the wall.

RETRIEVAL DEVICES // WHAT LIFTS WHAT

A 3-way rescue SRL, a personnel winch and a material work winch can look alike on a tripod leg. They are not interchangeable.



3-WAY RESCUE SRL

Self-retracting lifeline with a built-in crank. Arrests a fall while the worker climbs, then switches to retrieval mode to crank them out. Rated to ANSI Z359.14.

Lifts: People — fall arrest and emergency retrieval.



PERSONNEL WINCH

Lowers and raises a worker under control for the whole trip. Use with a separate fall-arrest SRL as the backup line.

Lifts: People — controlled lowering and raising, plus rated materials.



MATERIAL WORK WINCH

Raises and lowers tools, pumps and buckets. Has a friction brake but no fall-arrest function.

Lifts: Materials only. Never attach a person.

	MODEL	LINE	CABLE	TYPE	NOTES	ITEM #
	**R50G**	50 ft	Galvanized	RESCUE SRL	Dual inertia brake; friction brake on crank. Includes split pulley, carabiner, bracket. ANSI Z359.14-2021, 130–310 lb.	**VO-FC-R50G**
	**R50SS**	50 ft	Stainless	RESCUE SRL	Corrosion-resistant cable for wastewater and coastal sites. Class 1, 310 lb. Includes pulley, carabiner, bracket.	**VO-FC-R50SS**
	**R50T**	50 ft	Technora	RESCUE SRL	Synthetic line, lighter to carry. Class 1, 130–310 lb.	**VO-FC-R50T**
	**R100T**	100 ft	Technora	RESCUE SRL	100 ft synthetic line for deep wet wells and shafts. 310 lb.	**VO-FC-R100T**
	**FCP2005-100G**	100 ft	Galvanized	RESCUE SRL	100 ft galvanized cable. Class 1, 310 lb. 36.6 lb.	**VO-FC-FCP2005-100G**
	**FCP2005-100SS**	100 ft	Stainless	RESCUE SRL	100 ft stainless cable for corrosive spaces.	**VO-FC-FCP2005-100SS**
	**MW50G**	50 ft	Galvanized	WORK WINCH	Material winch, 350 lb. Friction brake, steel drum. Not a fall-arrest or rescue device.	**VO-FC-MW50G**
	**MW50SS**	50 ft	Stainless	WORK WINCH	Stainless version for corrosive sites. 350 lb. Materials only.	**VO-FC-MW50SS**
	**MW50T**	50 ft	Technora	WORK WINCH	Synthetic rope version. 350 lb. Materials only.	**VO-FC-MW50T**
	**3M Advanced Digital 200**	140 ft	Stainless	PERSONNEL WINCH	Two-speed (4:1 / 9:1), 450 lb, triple brakes, digital cycle counter. Fits DBI-SALA tripods, davits and side entry. Overload clutch sold separately for powered use.	**VO-ORS-8518586**

FrenchCreek R50G/R50SS/R50T mount to FrenchCreek tripods, the PD1 davit (via PD3) and Quad Pod. MW50 winches mount to the TP7/TP9 and to the PD1 via PD4. The 3M Salalift II personnel winch ships as part of the 8301085 and 8301087 tripod systems.

TRIPOD SYSTEMS // FRENCHCREEK

Start with a bare TP7 or TP9, or order a complete system with the rescue SRL already matched.



FRENCHCREEK

TP7 // 7 FT TRIPOD

HEIGHT	ANCHOR	USER
7 FT	5,000 LB	350 LB

- Aluminum tripod with telescoping legs and non-slip rubber shoes
- Two lifeline attachment points on the head
- Mount an R50G rescue SRL or MW50 work winch to a leg

INCLUDED Tripod only

ORDER SEPARATELY Retrieval device, harness, carry bag

ITEM # V0-FC-TP7



FRENCHCREEK

TP9 // 9 FT TRIPOD

HEIGHT	ANCHOR	USER
9 FT	5,000 LB	350 LB

- Same build as the TP7 with longer legs
- Extra headroom for tall equipment or deeper lifts over the opening
- Telescoping legs, two head attachment points

INCLUDED Tripod only

ORDER SEPARATELY Retrieval device, harness, carry bag

ITEM # V0-FC-TP9



FRENCHCREEK

S50G-7 // TRIPOD SYSTEM

HEIGHT	SRL	USER
7 FT	50 FT	350 LB

- TP7 tripod with an R50G 50 ft 3-way rescue SRL, 3/16 in galvanized cable
- Load-indicating swivel snap hook
- OSHA 1926.502 / 1910.66; ANSI Z359.1

INCLUDED TP7 + R50G

ORDER SEPARATELY Harness, carry bag

ITEM # V0-FC-S50G-7



FRENCHCREEK

S50G-M7 // TRIPOD, SRL & WORK WINCH

HEIGHT	SRL	WINCH
7 FT	50 FT	50 FT

- TP7 tripod with R50G rescue SRL for the entrant
- Adds an MW50G material work winch for tools and equipment
- Two lines over one opening: people on the SRL, materials on the winch

INCLUDED TP7 + R50G + MW50G

ORDER SEPARATELY Harness

ITEM # V0-FC-S50G-M7



FRENCHCREEK

R50G-TP7 // TRIPOD SYSTEM WITH BAG

HEIGHT	SRL	BAG
7 FT	50 FT	#204

- TP7 tripod with R50G 50 ft 3-way rescue SRL
- Ships with a #204 carry bag for the truck
- Ready to set over a manhole out of the box

INCLUDED TP7 + R50G + #204 bag

ORDER SEPARATELY Harness

ITEM # V0-FC-R50G-TP7



FRENCHCREEK

206 // TRIPOD CARRY BAG

SIZE	WEIGHT
32×66 IN	2.5 LB

- Heavy-duty bag sized for 7 ft tripods
- Protects legs and head in the truck bed or compartment

INCLUDED Bag only

ITEM # V0-FC-206

TRIPOD SYSTEMS // 3M DBI-SALA

Complete systems: tripod, retrieval device and mounting bracket in one item number.



3M DBI-SALA

8301091 // 7 FT TRIPOD + 3-WAY SRL

HEIGHT	SRL	USER
7 FT	50 FT SS	310 LB

- Aluminum tripod with 50 ft stainless Ultra-Lok 3-way retrieval SRL
- Adjustable locking legs, safety chain, built-in pulley, rubber feet
- Quick-mount bracket; 5,000 lb anchor eyebolts

INCLUDED Tripod + SRL + bracket
ORDER SEPARATELY Harness

ITEM # VO-ORS-8301091



3M DBI-SALA

8301094 // 9 FT TRIPOD + 3-WAY SRL

HEIGHT	SRL	USER
9 FT	50 FT SS	310 LB

- 9 ft version of the 8301091 system
- 50 ft stainless 3-way retrieval SRL
- Locking legs, safety chain, built-in pulley

INCLUDED Tripod + SRL + bracket
ORDER SEPARATELY Harness

ITEM # VO-ORS-8301094



3M DBI-SALA

8301085 // 9 FT TRIPOD + SALALIFT II WINCH

HEIGHT	WINCH	RATIO
9 FT	120 FT	6:1

- Tripod with Salalift II manual personnel winch, 120 ft stainless cable
- Free-wheel for fast cable payout
- For long lowers and raises where an SRL alone falls short

INCLUDED Tripod + winch + bracket
ORDER SEPARATELY Fall-arrest SRL, harness

ITEM # VO-ORS-8301085



3M DBI-SALA

8301087 // 7 FT TRIPOD + SALALIFT II WINCH

HEIGHT	WINCH	RATIO
7 FT	90 FT	6:1

- 7 ft tripod with Salalift II personnel winch, 90 ft stainless cable
- Built-in pulley and quick-mount bracket
- Pair with a 3-way SRL for a backup line

INCLUDED Tripod + winch + bracket
ORDER SEPARATELY Fall-arrest SRL, harness

ITEM # VO-ORS-8301087

CHOOSING A 3M SYSTEM

- SRL systems (8301091, 8301094) handle fall arrest and emergency retrieval on one line.
- Winch systems (8301085, 8301087) control the whole trip — add a fall-arrest SRL as the second line.
- 3M systems are rated for one 310 lb user on the SRL; FrenchCreek tripods for 350 lb (OSHA).
- Order a harness with each system — none is included.

DAVITS & SIDE ENTRY // 3M DBI-SALA

For larger openings, horizontal manways and sites where a tripod won't stand.



3M DBI-SALA

8000119 // LONG REACH DAVIT SYSTEM

HEIGHT	ROTATE	MATERIAL
87–110 IN	204°	205 KG

- Five-piece portable davit with leveling feet and mast rotation
- Fall arrest for 2 users, rescue for 1 user
- EN 795 B / EN 1496 B

INCLUDED Davit system

ORDER SEPARATELY Winch, SRL, harness

ITEM # VO-ORS-8000119



3M DBI-SALA

8000107 // SHORT REACH DAVIT ARM

MOBILE	FIXED
205 KG	340 KG

- Arm with built-in primary and secondary pulleys
- 205 kg on a mobile base, 340 kg on a fixed base
- Fits 3M DBI-SALA portable and permanent davit bases

INCLUDED Arm only

ORDER SEPARATELY 3M davit base, winch, SRL

ITEM # VO-ORS-8000107



3M DBI-SALA

8511233 // PORTABLE SIDE ENTRY SYSTEM

REACH	HEIGHT	WEIGHT
≤ 6 FT	3.2–4.4 FT	77 LB

- Clamps to a horizontal manway on tanks and vessels
- Built-in pulley and quick-mount bracket
- For side-entry openings a tripod or davit can't reach

INCLUDED Collar + arm

ORDER SEPARATELY Winch, SRL, harness

ITEM # VO-ORS-8511233



Manufacturer photo: 3M DBI-SALA davit with a personnel winch and SRL at a manhole. Winch, SRL and harness are ordered separately from the 8000119 davit system.



Manufacturer photo: 3M DBI-SALA 8511233 side entry system on a horizontal tank manway, shown with a winch (sold separately).

TRIPODS, WINCHES & EDGE RESCUE // KONG

Textile-rope systems from KONG (Italy) for rescue teams and utilities that work with rope.



KONG

CEVEDALE 2.0 // RESCUE TRIPOD

HEIGHT	WEIGHT	EN
185–275 CM	20.6 KG	795/B

- Six height positions; clawed feet for uneven ground
- Includes 3 OVAL ALU connectors, 10 m leg cord, steel leg cable and bag
- Configurable for RAIZER winches (sold separately)

INCLUDED Tripod + connectors + bag
ORDER SEPARATELY RAIZER winch

ITEM # VO-KONG-842030000KK



KONG

TRIPODE BASE // PORTABLE ANCHOR

HEIGHT	WEIGHT	EN
160–200 CM	14 KG	795/B

- Compact tripod anchor with anti-slip feet
- Includes 3 OVALONE CARBON AUTOBLOCK connectors and bag
- RAIZER rated 150 kg on this tripod

INCLUDED Tripod + connectors + bag
ORDER SEPARATELY Winch

ITEM # VO-KONG-842020000KK



KONG

TRIPODE MONO // TRIPOD WITH WINCH

LIFT	ANCHOR	EN
150 KG	3 USERS	1496/B

- Tripod with an integrated textile-rope winch
- Includes 3 connectors, pulley, BACK-UP device and bag
- One package for lowering and raising a worker

INCLUDED Tripod + winch + bag
ORDER SEPARATELY Rope, harness

ITEM # VO-KONG-842010000KK



KONG

RAIZER // RESCUE WINCH SET

RATIO	ROPE	EN
12.8 / 40:1	6–12 MM	1496/B

- Two-speed winch for textile rope
- Mounts to 48–50 mm tubes, the 4D POLE and KONG tripods
- 240 kg rated (150 kg on TRIPODE BASE)

INCLUDED Winch set
ORDER SEPARATELY Rope

ITEM # VO-KONG-817640000KK



KONG

GRIZZLY // EDGE DAVIT

WEIGHT
22.7 KG

- Rotating retrieval arm for wall edges and parapets
- Reversible feet
- Lifts a load out and over an edge

INCLUDED Davit
ORDER SEPARATELY Winch, rope

ITEM # VO-KONG-817400000KK



KONG

4D POLE // GIN POLE

LENGTH	WEIGHT
130–205 CM	10.5 KG

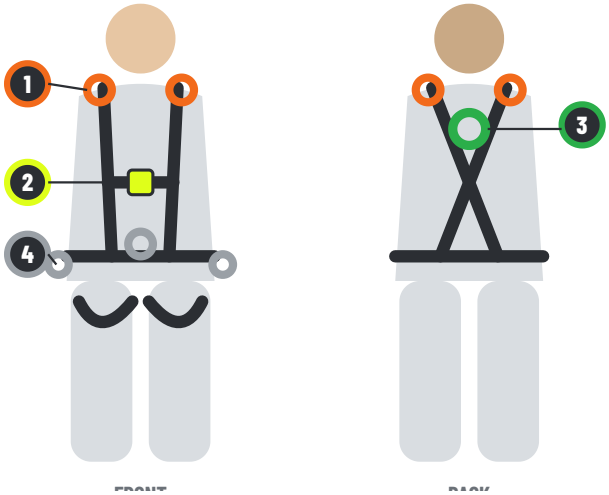
- Adjustable gin pole for high directionals over awkward openings
- Mounts a RAIZER winch

INCLUDED Pole
ORDER SEPARATELY Winch, guying

ITEM # VO-KONG-817500000KK

HARNESSES // CONFINED SPACE ENTRY

For vertical entry, look for shoulder retrieval points. All three harnesses below have them.



1 SHOULDER D-RINGS
Pair with a 702Y yoke. The worker comes up upright with a narrow profile — the best fit for small round openings.

2 STERNAL D-RING
Front connection for rescue lowering and ladder-climb systems.

3 DORSAL D-RING
Primary fall-arrest point. Acceptable retrieval point when the opening allows.

4 WAIST & HIP D-RINGS
Work positioning only — never for retrieval.



PMI

CS TECH // CONFINED SPACE HARNESS

NFPA 1983 III | WEIGHT 5.1 LB | USA

- One-piece rescue harness built for confined space
- Dorsal, sternal, waist and shoulder attachment points
- Break-apart leg and right-shoulder buckles; waist 31–52 in, leg 19–34 in

SIZES: One size

ITEM # VO-PMI-SG51156



SINGING ROCK

EXPERT 3D SPEED STEEL

ANSI Z359.11 | NFPA 1983 III | LOAD 330 LB

- Shoulder attachment points rated for rescue (EN 1497)
- Steel speed buckles; fall indicator
- EN 361 / 358 / 813

SIZES: S | M/L | XL

ITEM # VO-LM-497232 (S) / 497233 (M/L) / 497234 (XL)



KONG

ITAKA // WORK & RESCUE HARNESS

EN 361/358 | EN 813

- Ventral, sternal, dorsal and side attachment points
- Shoulder loops for vertical retrieval
- Removable chest section

SIZES: S/M | M/L | XL

ITEM # VO-KONG-8W9852000KK (S/M) / 853 (M/L) / 854 (XL)

ARC-FLASH & FR HARNESSES // UTILITY & ELECTRICAL WORK

For crews exposed to both a fall and an arc flash or open flame. Standard polyester webbing and bare steel hardware can ignite, melt or conduct.



MALTA DYNAMICS

FLASH HOG // FR / ARC FLASH HARNESS

ASTM	ANSI
F887-23	Z359.11

- FR webbing, dielectric over-molded hardware; meets ASTM F887-23 arc-flash requirements
- Dorsal D-ring for fall arrest; sternal D-ring for climbing systems

SIZES S/M | L/XL | 2XL | 3XL

ITEM # VO-VSG-VSGMD-B5000 (S/M) / B5001 (L/XL) / B5002 (2XL) / B5003 (3XL)



YATES

390FRA // ARC FLASH LINEMAN'S ROPE ACCESS HARNESS

ARC	WEB
RATED	NOMEX

- Nomex exterior over Kevlar reinforcement; wide anatomical waist pad
- Waist, hip, chest, lumbar and dorsal attachment points for rope access, positioning and fall arrest

SIZES S | M | L | XL

ITEM # VO-VSG-390FRAS / M / L / XL



FRENCHCREEK

AF630K-DE // ARC FLASH HARNESS

D-RING
DIELECTRIC

- Full-body harness designed for arc-flash work environments
- Single dorsal dielectric D-ring

SIZES XS | S | M | L | XL | 2XL | 3XL

ITEM # VO-FC-AF630K-DE-XS / -S / -M / -L / -XL / -2XL / -3XL



FRENCHCREEK

631KUT // KEVLAR DIELECTRIC HARNESS

OSHA	WEIGHT
400 LB	2.4 LB

- Heat- and flame-resistant Kevlar webbing
- Dielectric over-molded steel dorsal D-ring; FR covers on chest and leg buckles

SIZES S-M | M-XL

ITEM # VO-FC-631KUT-SM / -MXL



FRENCHCREEK

631B-HOT // KEVLAR WELDING HARNESS

ANSI	WEIGHT
130-310 LB	2.9 LB

- Flame-resistant Kevlar webbing for welding and hot work
- Dorsal D-ring plus hip positioning D-rings; standard (non-dielectric) hardware

SIZES S-M | M-XL

ITEM # VO-FC-631B-HOT-SM / -MXL



FRENCHCREEK

400BC BUCKLE COVERS

Insulated arc-flash buckle covers, 8.6 cal/cm^2.

ITEM # VO-FC-400BC



FRENCHCREEK

400SC-FR STRAP COVERS

Flame-resistant strap covers, 8.6 cal/cm^2.

ITEM # VO-FC-400SC-FR

Before you order: ASTM F887 covers arc-flash testing of fall protection — ask for it when arc flash is in your hazard assessment. Dielectric D-rings reduce conductivity at the attachment point but don't make a harness insulating PPE. Pair arc-rated harnesses with the AF390AK / AF390AKDLZ arc-flash lanyards. The 631B-HOT is a welding (hot-work) harness, not an arc-rated one.

RESCUE & RETRIEVAL GEAR // WRISTLETS TO STRETCHERS

For the retrieval itself: wristlets and yokes for tight openings, narrow baskets and boards for packaging a patient in a vault.



207 RESCUE WRISTLETS

Nylon wristlets for vertical retrieval through a tight opening. 0.5 lb.

VO-FC-207



207Y WRISTLETS + YOKE

Wristlets joined by a yoke to a single retrieval point. 0.7 lb.

VO-FC-207Y



207YL WRISTLETS + TAGLINE

Wristlets, yoke and a 25 ft tagline. 2.4 lb.

VO-FC-207YL



702Y RETRIEVAL YOKE

Web yoke with spreader bar and two snap hooks; connects shoulder D-rings to one line. 4.1 lb.

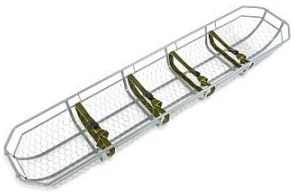
VO-FC-702Y



WL-10 FLEXIBLE LADDER

10 ft web ladder, 12 in fiberglass rungs, two carabiners included; ladders join end to end.

VO-FC-WL-10



JUNKIN JSA-300-CS BASKET

19 in narrow steel basket for confined space; 1,500 lb capacity; 80.5 in long. Made in USA.

VO-JS-JSA-300-CS



JUNKIN JSA-360-CS BACKBOARD

14 in wide wood backboard for narrow openings; 400 lb capacity. Made in USA.

VO-JS-JSA-360-CS



KONG ROLLY STRETCHER

Roll-up HDPE stretcher, 245×92 cm, 7.3 kg; vertical hanging kits for wells and tunnels.

VO-KONG-890010000KK (yellow) / 89001N000KK (black)



KONG HALF ROLLY

Rollable immobilizer, 135×92 cm, 5 kg.

VO-KONG-89002N000KK



KONG X-TRIM 4

4-section folding carbon spinal board, 182×42 cm, 6.8 kg.

VO-KONG-85512N000KK

WRISTLETS OR HARNESS?

OSHA 1910.146(k)(3)(i) allows wristlets instead of a harness only where the employer can show a harness is infeasible or creates a greater hazard. In most vaults and manholes, a harness with shoulder points plus the 702Y yoke is the standard setup.

ANCHORS // PUMP STATIONS, VAULTS & WATER FACILITIES

Inside lift stations and treatment plants, the overhead beam or the slab is often your anchor. These connect a fall-arrest SRL or lanyard to the structure.

BEAM CLAMPS & TROLLEYS

Slide onto an I-beam flange over a wet well, screen channel or pump. Trolleys roll along the beam with the worker.

BOLT-ON & WELD-ON PLATES

Permanent D-ring anchors on steel or concrete beside a hatch or ladder. Install per the manufacturer's instructions.

FALL-ARREST SRLS

Clip the SRL to the anchor for work at hatches, mezzanines and open tanks. These SRLs arrest falls only; they don't retrieve.



FRENCHCREEK 1700 SLIDING I-BEAM ANCHOR

Stainless; fits flanges 3.5–12 in up to 1.25 in thick. 6.2 lb.

VO-FC-1700



FRENCHCREEK 1702 SLIDING BEAM ANCHOR

Fits beam flanges 3.5–14 in.

VO-FC-1702



ELK RIVER I-BEAM SLIDER

Adjustable; fits 3-1/2 in to 12 in beams.

VO-ER-13028



FRENCHCREEK 106 I-BEAM TROLLEY

Rolling anchor for flanges 3–8 in. Order the 1910.66 or 1926.502 version.

VO-FC-106-1910P66 / -1926P502



FRENCHCREEK 1701 BOLT-ON PLATE

Bolt-on anchor plate with D-ring. Fasteners not included. 1.2 lb.

VO-FC-1701



FRENCHCREEK 1701-CSW WELD-ON PLATE

Carbon-steel weld-on anchor plate with D-ring.

VO-FC-1701-CSW



ELK RIVER 20 FT CABLE SRL

Galvanized cable SRL with snap hook and carabiner. Fall arrest only.

VO-ER-22520



3M DBI-SALA SMART LOCK 20 FT SRL

Galvanized cable, ANSI Z359.14 Class 1, 420 lb. Fall arrest only — not a retrieval device.

VO-ORS-3503872

CHECK BEFORE YOU ORDER

- Measure the beam flange width and thickness before ordering a clamp or trolley.
- The FrenchCreek 106 trolley comes in a 1910.66 and a 1926.502 version — pick the one your program follows.
- Bolt-on plates ship without fasteners; the anchor and its installation must support the loads in ANSI Z359 / OSHA.

WINCHES & RESCUE SRLS // RETRIEVAL HARDWARE

Every retrieval device we carry, by family. Mount brackets and compatibility are listed with each.



3M DBI-SALA

ADVANCED DIGITAL 200 // POWER DRIVE WINCH

CABLE	LOAD	SPEED
140 FT SS	450 LB	4:1 / 9:1

- Two-speed personnel/material winch with triple brakes
- Digital cycle counter; integrated quick-mount bracket
- Fits DBI-SALA tripods, davits and the side entry system

INCLUDED Winch

ORDER SEPARATELY Overload clutch for powered use

ITEM # VO-ORS-8518586



FRENCHCREEK

MW50 SERIES // MATERIAL WORK WINCHES

CABLE	LOAD
50 FT	350 LB

- Galvanized (MW50G), stainless (MW50SS) or Technora rope (MW50T)
- Friction brake, steel frame and drum; pulley and carabiner included
- Mounts to TP7/TP9 tripods and the PD1 davit (PD4 bracket). Materials only

ITEM # VO-FC-MW50G / VO-FC-MW50SS / VO-FC-MW50T



KONG

RAIZER // RESCUE WINCH SET

RATIO	ROPE	EN
12.8 / 40:1	6-12 MM	1496/B

- Two-speed winch for textile rope
- Mounts to 48–50 mm tubes, the 4D POLE and KONG tripods
- 240 kg rated (150 kg on TRIPODE BASE)

INCLUDED Winch set

ORDER SEPARATELY Rope

ITEM # VO-KONG-817640000KK



FRENCHCREEK

R50 SERIES // 50 FT 3-WAY RESCUE SRLS

LINE	USER
50 FT	130–310 LB

- Galvanized (R50G), stainless (R50SS) or Technora rope (R50T)
- Fall arrest while climbing; crank-up retrieval in an emergency
- Pulley, carabiner and mounting bracket included

ITEM # VO-FC-R50G / VO-FC-R50SS / VO-FC-R50T



FRENCHCREEK

100 FT 3-WAY RESCUE SRLS

LINE	USER
100 FT	310 LB

- For deep wet wells, shafts and tanks
- Galvanized (FCP2005-100G), stainless (FCP2005-100SS) or Technora (R100T)
- ANSI Class 1 rescue SRLs with retrieval crank

ITEM # VO-FC-FCP2005-100G / -100SS / VO-FC-R100T

CHECK BEFORE YOU ORDER

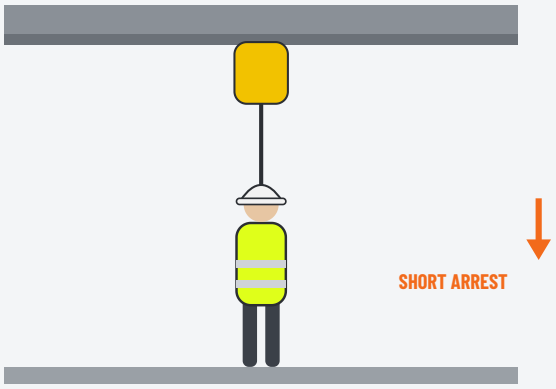
- Personnel or materials? Only rescue SRLs and personnel winches lift people.
- Match the bracket to the frame: FrenchCreek fits FrenchCreek; 3M fits 3M DBI-SALA.
- Line length must reach the floor of the space with wraps left on the drum.
- Stainless in sewers and lift stations — H_2S corrodes galvanized cable.

FALL-ARREST SRLS // PUMP STATIONS, TANKS & PLANTS

These SRLs arrest a fall — they don't retrieve. Use them at hatches, mezzanines, ladders and open tanks, alongside the anchors on the previous page.

CLASS 1 / CLASS A

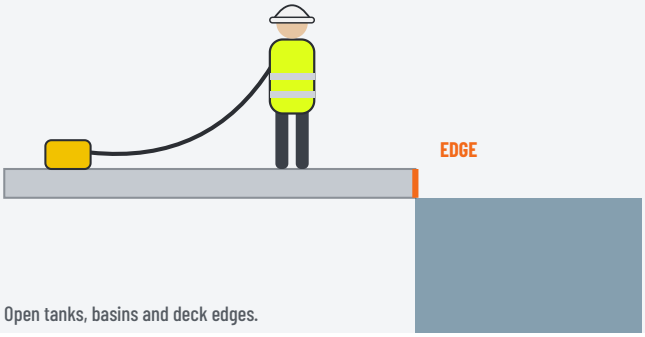
ANCHOR AT OR ABOVE THE DORSAL D-RING



Beam, trolley or anchor plate overhead.

CLASS 2 / CLASS B

ANCHOR AT FOOT LEVEL · EDGE HAZARD



Open tanks, basins and deck edges.

CLASS 1 VS CLASS 2

ANSI Z359.14-2021 Class 1 SRLs anchor at or above the D-ring. Class 2 units are tested for foot-level anchorage and edges. Elk River labels use the earlier Class A / Class B names.

WEB OR CABLE?

Web SRLs (6–13 ft) are light personal units off the harness. Cable SRLs (11–66 ft) cover more ground and hold up to wet, abrasive sites.

EXPLOSIVE ATMOSPHERES

The KONG RFA is ATEX-rated (II 2 G c T6) for potentially explosive atmospheres — check it against your area classification.

CHECK BEFORE YOU ORDER

- Measure fall clearance: SRL arrest distance + D-ring shift + harness stretch + worker height + a safety margin must fit below the working level.
- Foot-level or edge work needs a Class 2 / Class B SRL — never a Class 1.
- Inspect the impact indicator before each use; remove any unit that has arrested a fall.

FALL-ARREST SRL CHART // SHORTEST TO LONGEST

Specs as listed by the manufacturers. A dash means the spec isn't published for that model.

	MODEL	LENGTH	LINE	CLASS	CAPACITY	HOUSING	BEST USE	ITEM #
	**Malta Dynamics Pygmy Hog**	6 ft	UHMWPE / polyester web	Class 1-P (Z359.14-2021)	130–310 lb	Thermoplastic · 2.4 lb	Personal SRL off the dorsal D-ring; can pair as a dual SRL	**VO-VSG-C7102-G2**
	**Elk River 22507 Web SRL**	7 ft	1 in Dyneema web	Class A (Z359.14)	—	Aluminum	Overhead anchor at hatches and mezzanines; arrests in under 24 in	**VO-ER-22507**
	**Elk River 22508 Twin-Leg Web SRL**	7 ft ×2	1 in Dyneema web	Class A (Z359.14)	—	Aluminum	100% tie-off while moving between anchors	**VO-ER-22508**
	**FrenchCreek XR-7W Outlaw**	7 ft	1 in web	Class 1 (Z359.14-2021)	130–310 lb ANSI · 420 lb OSHA	Cast aluminum · 6 lb	Swivel anchor; internal energy absorber	**VO-FC-XR-7W**
	**FrenchCreek MRG1-OZ Rogue**	8 ft	1 in Dyneema web	Class 1 (Z359.14-2021)	130–310 lb ANSI · 400 lb OSHA	Thermoplastic · 3.4 lb	Light personal SRL; swivel only at housing	**VO-FC-MRG1-OZ**
	FrenchCreek MRG3-OZ Rogue	8 ft	1 in Dyneema web	Class 1 (Z359.14-2021)	130–310 lb ANSI · 400 lb OSHA	Thermoplastic · 4.9 lb	Personal SRL with steel carabiner at housing	**VO-FC-MRG3-OZ**
	**Elk River 22511 Web SRL**	11 ft	1 in Dyneema web	Class A (Z359.14)	—	Aluminum	A little more reach around a pump or tank	**VO-ER-22511**
	**FrenchCreek XR-11G Outlaw**	11 ft	Galvanized cable	Class 1 (Z359.14-2021)	130–310 lb ANSI · 420 lb OSHA	Thermoplastic · 6 lb	Cable for abrasive or wet sites; load-indicating hook	**VO-FC-XR-11G**
	FrenchCreek RG3-13-OZ Renegade	13 ft	1 in nylon web	Class 1	130–310 lb ANSI · 400 lb OSHA	SS/aluminum · 4.7 lb	No annual factory recertification required	**VO-FC-RG3-13-OZ**
	**Elk River 22520 Cable SRL**	20 ft	3/16 in galv. cable	Class A (Z359.14)	—	Thermoplastic	Overhead beam or trolley in a lift station	**VO-ER-22520**
	**3M DBI-SALA Smart Lock 3503872**	20 ft	Galvanized cable	Class 1 (Z359.14-2021)	420 lb	—	Overhead anchor; heavy-user rated	**VO-ORS-3503872**
	**Malta Dynamics Hybrid Hog**	20 or 30 ft	—	Class 1	—	—	Overhead fall arrest — not leading edge or foot level	**VO-VSG-C9001-G2-20FT / -30FT**
	**FrenchCreek XR-20LEG Outlaw**	20 ft	Galvanized cable	Class 2 (Z359.14)	130–310 lb ANSI · 420 lb OSHA	Thermoplastic · 10 lb	Leading-edge shock pack: open tank and basin edges	**VO-FC-XR-20LEG**
	**FrenchCreek RL50GZ**	50 ft	Galvanized cable	Class 1	310 lb	Cast aluminum	Long reach across a treatment-plant roof or deck	**VO-FC-RL50GZ**
	**Elk River 22551 Foot-Level SRL**	50 ft	3/16 in galv. cable	Class B (Z359.14)	—	Thermoplastic	Anchor at foot level; arrests in under 54 in	**VO-ER-22551**
	**KONG RFA 20 m**	20 m (66 ft)	4.5 mm zinc-plated cable	EN 360 · ATEX II 2 G c T6	—	ABS · 7.2 kg	ATEX-rated for potentially explosive atmospheres	**VO-KONG-225010200KK**
	**SKYLOTEC Gordon Rescue Block**	Per rope	SKYLOTEC-approved rope	Z359.14:2014 · EN 360	5–140 kg (11–308 lb)	Al/steel · 1.8 kg	Fall arrest + rescue belay in one device; works both directions	**VO-PMI-SYHSG020R**

Rescue SRLs with a retrieval crank (FrenchCreek R50 / FCP2005 / R100T, 3M 3-way units) are on the Retrieval Devices and Winches pages.

SELECTION CHART // ENTRY & RETRIEVAL SYSTEMS

Every system ships without a harness. "Capacity" is the manufacturer's user or anchor rating as listed.

SYSTEM	TYPE	HEIGHT / REACH	RETRIEVAL DEVICE	CAPACITY	IN THE BOX	ITEM #
FrenchCreek TP7	Tripod	7 ft	—	350 lb	Tripod only	**VO-FC-TP7**
FrenchCreek TP9	Tripod	9 ft	—	350 lb	Tripod only	**VO-FC-TP9**
FrenchCreek S50G-7	Tripod system	7 ft	50 ft galv. rescue SRL	350 lb	TP7 + R50G	**VO-FC-S50G-7**
FrenchCreek S50G-M7	Tripod system	7 ft	50 ft SRL + 50 ft work winch	350 lb	TP7 + R50G + MW50G	**VO-FC-S50G-M7**
FrenchCreek R50G-TP7	Tripod system	7 ft	50 ft galv. rescue SRL	350 lb	TP7 + R50G + bag	**VO-FC-R50G-TP7**
3M DBI-SALA 8301091	Tripod system	7 ft	50 ft SS 3-way SRL	310 lb	Tripod + SRL	**VO-ORS-8301091**
3M DBI-SALA 8301094	Tripod system	9 ft	50 ft SS 3-way SRL	310 lb	Tripod + SRL	**VO-ORS-8301094**
3M DBI-SALA 8301087	Tripod system	7 ft	90 ft Salalift II winch	—	Tripod + winch	**VO-ORS-8301087**
3M DBI-SALA 8301085	Tripod system	9 ft	120 ft Salalift II winch	—	Tripod + winch	**VO-ORS-8301085**
KONG CEVEDALE 2.0	Tripod	185–275 cm	RAIZER (separate)	EN 795/B	Tripod + 3 connectors + cord + bag	**VO-KONG-842030000KK**
KONG TRIPODE BASE	Tripod	160–200 cm	—	EN 795/B	Tripod + 3 connectors + bag	**VO-KONG-842020000KK**
KONG TRIPODE MONO	Tripod + winch	160–200 cm	Integrated rope winch	150 kg lift	Tripod + winch + pulley + BACK-UP	**VO-KONG-842010000KK**
FrenchCreek PD1 + base	Davit	12–30 in reach	R50G via PD3; MW50G via PD4	450 lb sleeves	Mast only — build by part	**VO-FC-PD1**
3M DBI-SALA 8000119	Davit system	87–110 in	Winch/SRL separate	1 rescue user	5-piece davit	**VO-ORS-8000119**
3M DBI-SALA 8511233	Side entry	≤ 6 ft reach	Winch/SRL separate	—	Collar + arm	**VO-ORS-8511233**

MATCH THE SYSTEM TO

- Opening type and the clear space around it
- Depth to the floor of the space → line length
- Corrosive atmosphere → stainless cable
- One line or two (people + materials)
- Who carries it, and in which truck

DON'T FORGET

- Harness with retrieval points — or wristlets
- Carry bag for the tripod
- Ventilation (next section)
- Hands-free light for the entrant
- Hi-vis and traffic control for the street







SUPPLY · EXHAUST · PURGE

VENTILATION

Fresh air is the first control in most permit spaces. Allegro blowers, duct, manhole passthrus and guard rails — AC, gas and explosion-proof — sized for manholes, vaults, wet wells and tanks.

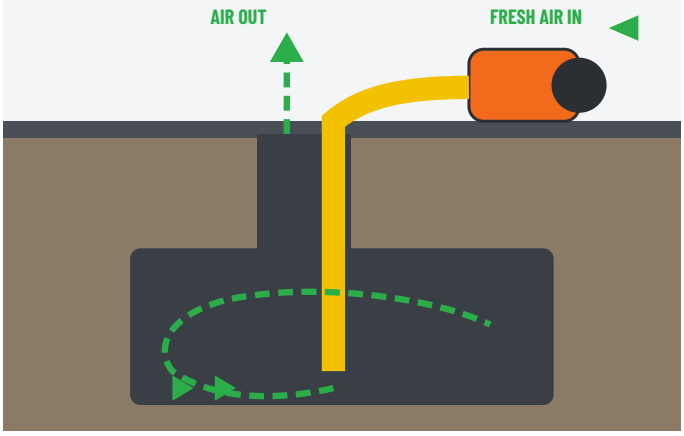
Allegro | **Axial** | **Centrifugal** | **Explosion-proof** | **Gas** | **8 in & 12 in duct**

HOW VENTILATION WORKS // SUPPLY OR EXHAUST

Most manhole and vault entries use supply (positive-pressure) ventilation. Exhaust is used to pull contaminants away from a source such as welding or coating.

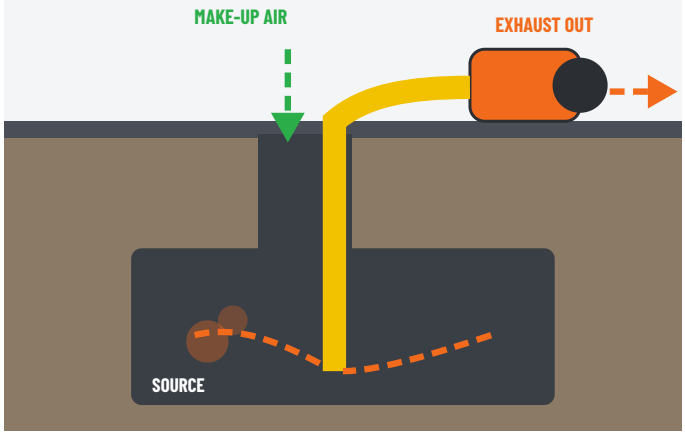
SUPPLY // PUSH

Blower blows fresh air down the duct



EXHAUST // PULL

Blower pulls air up from the source



PURGE BEFORE ENTRY

Ventilate before anyone goes in, then test the air again. Keep the blower running for the whole entry.

FRESH AIR IN, FROM A CLEAN SPOT

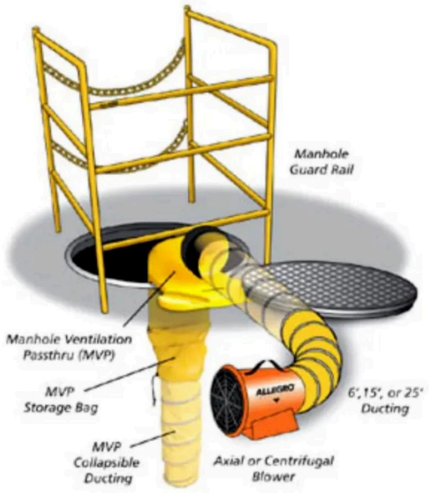
Set the blower upwind, away from truck and generator exhaust. Never place a gas blower where its own exhaust can reach the intake.

PUT THE DUCT WHERE THE WORKER IS

Run the duct down to the work zone, not just into the top of the opening, so the air sweeps the breathing zone.

EVERY BEND COSTS AIRFLOW

The Allegro 9533 drops from 831 CFM in free air to 709 with one 90° bend and 586 with two — keep the duct as straight as you can.



Manufacturer diagram: Allegro guard rail, Manhole Ventilation Passthru (MVP) and blower. The MVP elbow sits under the guard-rail crossbar, so the duct doesn't block the opening.

HOW FAST IS ONE AIR CHANGE?

A manhole 4 ft across and 10 ft deep holds about 126 ft^3. At 586 CFM (8 in blower, two bends) the air turns over about 4.6 times a minute. Divide the space volume by the blower's CFM at your duct setup to estimate one air change, then purge for the time your entry program requires.

WHAT COMES IN THE BOX // BLOWER PACKAGES

A "system" item number ships the blower, a storage canister and duct together. Blower-only item numbers need duct ordered with them.

ALLEGRO 9543-25 // 12 IN SYSTEM

ITEM # VO-ORS-9543-25



1. **12 IN AXIAL BLOWER**
   1 hp, 115–230V. 1,842 CFM free air; 1,004 / 933 CFM with one / two 90° bends.
2. **STORAGE CANISTER**
   Attaches to the blower inlet (exhaust) or outlet (supply). The duct packs inside for transport.
3. **12 IN × 25 FT DUCT**
   Standard yellow duct with wire helix.
4. **SWITCH & 13 FT CORD**
   UL Listed, CSA. Plugs into standard AC power.

ORDER SEPARATELY MVP 12 in passthru (VO-ORS-9510-60) · guard rail (VO-ORS-9401) · extra 12 in duct (VO-ORS-9535-12DL)

ALLEGRO 9538-25 // EXPLOSION-PROOF SYSTEM

ITEM # VO-ORS-9538-25



1. **EXPLOSION-PROOF BLOWER**
   8 in axial, 1/3 hp XP motor. Class I Div 1&2 Groups C,D; Class II Div 1&2 Groups F,G.
2. **STORAGE CANISTER**
   Same canister design; duct stores inside.
3. **25 FT CONDUCTIVE DUCT**
   Statically conductive, neoprene-coated — required to carry the hazardous-location rating through the duct run.
4. **GROUND WIRE**
   Clamp to a verified ground before running the blower.
5. **SWITCH & CORD**
   Needs an explosion-proof plug and socket, ordered separately.

ORDER SEPARATELY XP plug/socket for the power source · MVP 8 in passthru (VO-ORS-9510-50) · guard rail (VO-ORS-9401)

BEFORE YOU ORDER

- Hazardous-location ratings above apply to the Allegro 9538 and 9538-25 only. No other blower in this catalog carries one.
- Standard yellow duct (9500 series, 9535) is not statically conductive. Use the conductive duct that ships with the 9538-25 in classified locations.
- The 9533-15 COM-PAX-IAL system packs the same way: 8 in blower, canister and 15 ft duct.

BLOWER COMPARISON // POWER, AIRFLOW & PORTABILITY

Airflow is listed in free air / with one 90° bend / with two 90° bends, per Allegro. Weights are approximate.

	MODEL	FAN	POWER	CFM	DUCT IN THE BOX	WEIGHT	HAZ. LOCATION
	**9533-15 // 8 in COM-PAX-IAL System**	Axial	AC 115V · 1/3 hp	**831 / 709 / 586**	8 in × 15 ft + canister	Blower ~17 lb	Not rated
	**9543-25 // 12 in Axial System**	Axial	AC 115–230V · 1 hp	**1,842 / 1,004 / 933**	12 in × 25 ft + canister	49 lb	Not rated
	**9533 // 8 in Axial Blower**	Axial	AC 115/230V · 1/3 hp	**831 / 709 / 586**	None — order separately	~17 lb	Not rated
	**9538 // 8 in Explosion-Proof Blower**	Axial	AC 115V XP · 1/3 hp	**900 / 650 / 625**	None — order separately	~17 lb	**Class I Div 1&2 Grp C,D · Class II Div 1&2 Grp F,G**
	**9538-25 // Explosion-Proof System**	Axial	AC 115V XP · 1/3 hp	**900 / 650 / 625**	8 in × 25 ft conductive + canister	~30 lb	**Class I Div 1&2 Grp C,D · Class II Div 1&2 Grp F,G**
	**9504 // 8 in Centrifugal Blower**	Centrifugal	AC 115V · 1/3 hp	**1,066 / 839 / 745**	None — order separately	38 lb	Not rated
	**9505 // 8 in Gas Centrifugal Blower**	Centrifugal	Gas · 5 hp Briggs & Stratton	**1,390 / 1,152 / 1,079**	6 ft inlet hose ext. only	~62 lb	Not rated

POWER SOURCE

AC is quiet and clean wherever you have a generator or outlet. **Gas** (9505) runs anywhere but must sit downwind with its exhaust away from the intake. **Explosion-proof** (9538) is for classified locations.

DUCT DIAMETER & LENGTH

8 in duct is lighter and fits through a guard rail with the MVP. **12 in** moves far more air for big vaults and tanks. Longer runs and more bends cut airflow — centrifugal blowers hold pressure better on long runs.

PORTABILITY

The 8 in axial blowers are about 17 lb and carry one-handed. The 12 in system (49 lb) and gas unit (~62 lb) are two-hand or two-person lifts. Canister systems keep the duct packed with the blower.

PICK A PACKAGE BY THE JOB

JOB	START WITH	ADD
Street manhole, AC power on the truck	9533-15 system (VO-ORS-9533-15)	MVP 8 in (VO-ORS-9510-50) · guard rail (VO-ORS-9401)
Large vault, tank or long duct run	9543-25 system (VO-ORS-9543-25)	MVP 12 in (VO-ORS-9510-60) · 12 in × 25 ft duct (VO-ORS-9535-12DL)
Classified (hazardous) location	9538-25 system (VO-ORS-9538-25)	XP plug and socket (sold separately)
No power available	9505 gas blower (VO-ORS-9505)	8 in × 15 or 25 ft duct (VO-ORS-9500-15 / -25) · MVP 8 in
Long runs with several bends	9504 centrifugal (VO-ORS-9504)	8 in duct sized to the run

BLOWERS // ALLEGRO

CFM tile shows free-air output. See the comparison chart for bends, duct and weight.



ALLEGRO

9533-15 // 8 IN COM-PAX-IAL SYSTEM

CFM 831

- Blower, storage canister and 15 ft duct in one carry package
- Duct stores inside the canister between jobs
- Canister fits the inlet (exhaust) or outlet (supply)

ITEM # VO-ORS-9533-15



ALLEGRO

9543-25 // 12 IN AXIAL SYSTEM

CFM 1,842

- Highest airflow in this section
- 12 in duct moves air in larger vaults and tanks
- 13 ft cord; UL Listed, CSA

ITEM # VO-ORS-9543-25



ALLEGRO

9533 // 8 IN AXIAL BLOWER

CFM 831

- Same blower as the 9533-15, sold alone
- Add 8 in duct and an MVP to match the job

ITEM # VO-ORS-9533



ALLEGRO

9538 // 8 IN EXPLOSION-PROOF BLOWER

CFM 900 | HAZLOC C1/C2

- Explosion-proof motor for classified locations
- Requires an XP plug/socket, sold separately
- Use statically conductive duct in hazardous locations

ITEM # VO-ORS-9538



ALLEGRO

9538-25 // EXPLOSION-PROOF SYSTEM

CFM 900 | HAZLOC C1/C2

- 9538 blower with canister and 25 ft statically conductive duct
- Duct ground wire must be grounded before use
- XP socket sold separately

ITEM # VO-ORS-9538-25



ALLEGRO

9504 // 8 IN CENTRIFUGAL BLOWER

CFM 1,066

- Centrifugal design holds airflow better through long duct runs and bends
- Two 8 in ports for supply or exhaust
- CFM tested with 15 ft duct

ITEM # VO-ORS-9504

GAS BLOWER & ACCESSORIES // ALLEGRO

Passthrus, guard rails and duct to complete a ventilation setup.



ALLEGRO

9505 // 8 IN GAS CENTRIFUGAL BLOWER

CFM
1,390

- Runs where there is no power
- 3.2 qt tank, about 3–4 hours
- Keep the engine exhaust downwind and away from the blower intake

ITEM # VO-ORS-9505



ALLEGRO

MVP 8 IN MANHOLE PASSTHRU

- Low-profile elbow fits under the guard-rail crossbar and leaves the opening clear for entry. Collapsible 8 in duct drops into the space. ~11 lb.

ITEM # VO-ORS-9510-50



ALLEGRO

MVP 12 IN MANHOLE PASSTHRU

- 12 in version; duct extends about 6 ft into the space. 17 lb. Not statically conductive.

ITEM # VO-ORS-9510-60



ALLEGRO

33 IN MANHOLE GUARD RAIL

- 33×33 in protected area, 42.25 in tall, steel; tool-free; chains and flags. Folds to 4 in thick. OSHA 1910.146(c)(5)(ii)(B).

ITEM # VO-ORS-9401



ALLEGRO

8 IN × 15 FT DUCT

- PVC-coated standard duct, –20 to 180°F. Not conductive.

ITEM # VO-ORS-9500-15



ALLEGRO

8 IN × 25 FT DUCT

- PVC-coated standard duct, –20 to 180°F. Not conductive.

ITEM # VO-ORS-9500-25



ALLEGRO

12 IN × 25 FT DUCT

- 12 in duct with nylon straps for the 9543 system.

ITEM # VO-ORS-9535-12DL







HEADLAMPS · TASK LIGHTS · SCENE LIGHTS

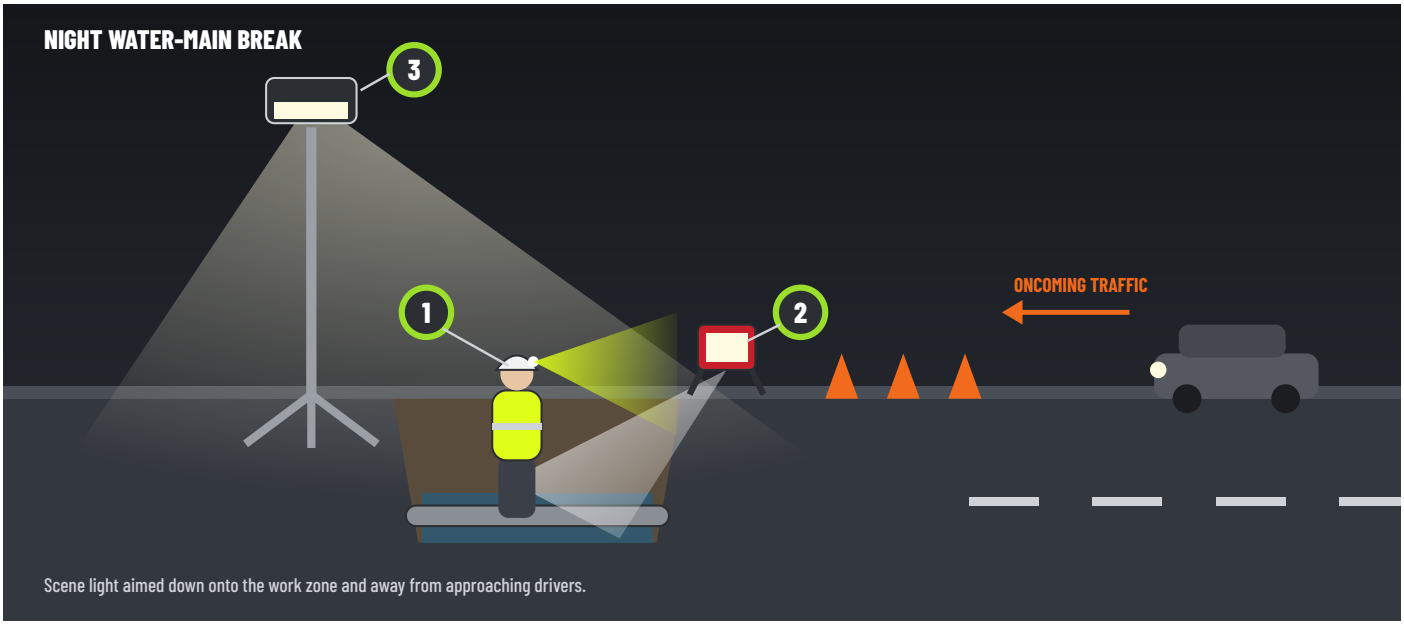
FIELD & SCENE LIGHTING

Main breaks, storm restoration and lift-station alarms don't wait for daylight. Pick lighting by what the crew needs to see: where they look, the repair in front of them, and the whole worksite.

Dorcy | DieHard | FoxFury | Koehler Bright Star | Streamlight

THREE LIGHTS, THREE JOBS // LIGHT WHAT YOU NEED TO SEE

One light can't do everything. A crew working a night repair usually needs all three.



Scene light aimed down onto the work zone and away from approaching drivers.

1 HEADLAMP // WHERE YOU LOOK

185–1,000 LM

Hands-free light that follows your eyes — reading a valve box, climbing down a ladder, working inside a vault. Right-angle lights clip to a vest or harness strap instead.

CHECK: motion-sensor switches for gloved hands; high-CRI if you read wire colors; red mode keeps night vision.

2 TASK LIGHT // THE REPAIR

300–1,850 LM

Stand-up, magnetic or hanging light aimed at the pipe, splice or pump in front of the crew. Frees the headlamp for close work.

CHECK: a base that sits on uneven ground; power-bank output to charge radios and phones; runtime on the setting you will really use.

3 SCENE LIGHT // THE WHOLE SITE

3,300–17,600 LM

Lights the excavation, equipment and walking paths so everyone on site can see and be seen. Cordless FoxFury units need no generator.

CHECK: mount height and spread; aim it down and away from drivers — glare can blind approaching traffic.

FLAMMABLE ATMOSPHERES

- The Koehler Bright Star WorkSafe 2206 lantern (VO-KBS-08050-PK6) is intrinsically safe: Class I, II, III Div 1 & 2, Groups A–G, T5 (UL 913). The rating holds only with Duracell MN1300 or Energizer E95 D cells.
- The Bright Star Vision headlamp is not hazardous-location rated. Confirm the rating of any light before using it where flammable gas or dust may be present.

HEADLAMPS & RIGHT-ANGLE LIGHTS // HANDS-FREE

Lumens shown are maximum output. Most are sold in multi-packs to outfit a crew.



DORCY PRO 1000 HEADLAMP

1,000 LM Aluminum, IPX4, up to 12 h, 144 m beam. 3-pack.

VO-DOR-1000



DORCY ULTRA HD 650 HEADLAMP

650 LM Motion sensor, spot-to-flood, red mode, 130 m. 3-pack.

VO-DOR-41-4337-PK3



DORCY PRO 470 HIGH CRI & UV

470 LM High-CRI mode shows true wire colors; UV for leak tracing. 6-pack.

VO-DOR-41-4320-PK6



DIEHARD 375 MOTION HEADLAMP

375 LM USB-C rechargeable; wave on/off. 3-pack.

VO-DOR-41-6642-PK3



DORCY 335 MULTI-FUNCTION

335 LM White plus red and green modes; 3×AAA included. 6-pack.

VO-DOR-41-2093



DORCY 300 MOTION HEADLAMP

300 LM Motion-sensor on/off for gloved hands. 6-pack.

VO-DOR-41-2104-PK6



BRIGHT STAR VISION HEADLAMP

185 LM Spot and flood; 6–100 h; USB recharge 2.5 h; IPX4. 6-pack.

VO-KBS-200521-PK6



FOXFURY BT2+ RIGHT-ANGLE

700 LM Clips to a vest or harness strap; dock and AC adapter included. Black or orange.

VO-FOX-380-BT2P-BLR / -ORR



BRIGHT STAR RESPONDER PRO

Right-angle light for gear straps; AC wall and DC vehicle chargers.

VO-KBS-520221-UTIL

TASK & SPOT LIGHTS // THE REPAIR AREA

Flood for the work in front of you; spot for reaching down a shaft or across a site.



DORCY 1500 UTILITY LIGHT

1,500 LM Stand-up area light with USB power bank. 3-pack.

VO-DOR-41-4336-PK3



DIEHARD 1500 UTILITY LIGHT

1,500 LM Stand-up area light with USB power bank. 3-pack.

VO-DOR-1500



DORCY FOLDABLE WORK LIGHT

450 LM Magnetic base, hook, 180° head, dimmable. 6-pack.

VO-DOR-41-4343



STREAMLIGHT E-FLOOD FIREBOX

1,500 LM Wide flood, 90° head; 8.5 h high / 20 h low; blue rear LEDs.

VO-ORS-45811



BRIGHT STAR RAPTOR FLOOD

375 LM Full-size flood lantern; stable base for hands-free use. Green or red.

VO-KBS-RF4GNA / RF4RNA



BRIGHT STAR LIGHTHAWK GEN II

300 LM 70,000 cd, 447 m beam; AC + 12/24V DC chargers. Orange, black, yellow.

VO-KBS-07610-UTIL / 07611 / 07612



BRIGHT STAR WORKSAFE 2206

90 LM Intrinsically safe lantern (see note). 4×D, about 150 h. 6-pack.

VO-KBS-08050-PK6



DORCY 1300 SPOTLIGHT

1,300 LM Kickstand, trigger lock, power bank; 6 h high. 2-pack.

VO-DOR-1300



DORCY PRO 1850 SPOTLIGHT

1,850 LM 440 m beam, foldout stand, power bank. 2-pack.

VO-DOR-41-1038-PK2

SCENE LIGHTING // FOXFURY

Cordless scene lights that set up in minutes — no generator, no cords across the work zone.



FOXFURY

NOMAD NOW // SCENE LIGHT

LUMENS	POWER
3,300	CORDLESS

- Sliding diffuser switches between spot and flood
- Multi-unit remote activation — light several units at once
- Rechargeable; sets up in seconds at a main break or vault

ITEM # VO-FOX-200-400-100



FOXFURY

NOMAD TRANSFORMER // FIELD KIT

LUMENS	GENERATOR
17,600	NONE

- Transformer scene light with independently aimed heads
- Kit includes FoxFury parts 200-1200 (Transformer light), 480-T09 and 850-200-1200
- Lights a full worksite without a generator

ITEM # VO-FOX-NMD-KIT-NT

LIGHT	MAX LUMENS	USE	ITEM #
Dorcy Pro 1000 Headlamp	1,000	Headlamp	VO-DOR-1000
Dorcy Ultra HD 650 Headlamp	650	Headlamp	VO-DOR-41-4337-PK3
Dorcy Pro 470 High CRI & UV	470	Headlamp	VO-DOR-41-4320-PK6
DieHard 375 Motion Headlamp	375	Headlamp	VO-DOR-41-6642-PK3
Dorcy 335 Multi-Function	335	Headlamp	VO-DOR-41-2093
Dorcy 300 Motion Headlamp	300	Headlamp	VO-DOR-41-2104-PK6
Bright Star Vision Headlamp	185	Headlamp	VO-KBS-200521-PK6
FoxFury BT2+ Right-Angle	700	Right-angle	VO-FOX-380-BT2P-BLR / -ORR
Bright Star Responder Pro	—	Right-angle	VO-KBS-520221-UTIL
Dorcy 1500 Utility Light	1,500	Task / spot	VO-DOR-41-4336-PK3
DieHard 1500 Utility Light	1,500	Task / spot	VO-DOR-1500
Dorcy Foldable Work Light	450	Task / spot	VO-DOR-41-4343
Streamlight E-Flood FireBox	1,500	Task / spot	VO-ORS-45811
Bright Star Raptor Flood	375	Task / spot	VO-KBS-RF4GNA / RF4RNA
Bright Star LightHawk Gen II	300	Task / spot	VO-KBS-07610-UTIL / 07611 / 07612
Bright Star WorkSafe 2206	90	Task / spot	VO-KBS-08050-PK6
Dorcy 1300 Spotlight	1,300	Task / spot	VO-DOR-1300
Dorcy Pro 1850 Spotlight	1,850	Task / spot	VO-DOR-41-1038-PK2
FoxFury Nomad NOW	3,300	Scene	VO-FOX-200-400-100
FoxFury Nomad Transformer Kit	17,600	Scene	VO-FOX-NMD-KIT-NT







HI-VIS · HANDS · HEAD · EYES · EARS · LINEMAN GEAR

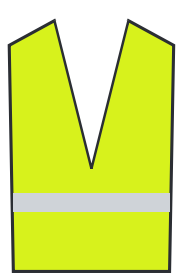
CREW PROTECTION

Crews working in the street and on energized lines need to be seen, and they need the right glove for the right hazard. Hi-vis comes first, then gloves, head, eye and hearing protection and lineman fall protection.

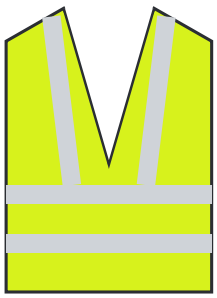
FrenchCreek | HexArmor | Carolina Glove | Malta Dynamics | Edelrid | Ergodyne

HI-VIS // ANSI/ISEA 107 CLASSES & THE RULES FOR THE STREET

Hi-vis garments are rated by how much fluorescent background and retroreflective material they carry. More material = seen sooner, from farther away, in more directions.



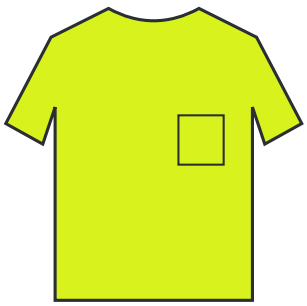
CLASS 1



CLASS 2



CLASS 3



NOT RATED

	CLASS 1	CLASS 2	CLASS 3	NON-ANSI HI-VIS
Background material (min.)	217 in^2	775 in^2	1,240 in^2	Not rated
Retroreflective (min.)	155 in^2	201 in^2	310 in^2	None
Garment type	Type O (off-road)	Type R or P	Type R or P; sleeves required	Shirt
Roadway work zone?	**No**	**Yes**	**Yes — best at night & high speed**	Only under a rated vest

THE RULE FOR THE RIGHT-OF-WAY

The federal MUTCD requires workers within the right-of-way who are exposed to traffic or work vehicles to wear high-visibility apparel meeting ANSI/ISEA 107 Performance Class 2 or 3. A Class 1 garment does not meet that requirement. Some states, including Maryland on state highways, require Class 3 — check your state's rules and your agency policy.

CHECK BEFORE YOU ORDER

- Class 2 or 3 for any work in or next to traffic.
- Type R vests for roadway work; Type P is cut for public-safety gear.
- Wearing a harness? Use a vest with D-ring openings so the vest doesn't cover the attachment points.
- A hi-vis T-shirt without reflective striping is daytime visibility only — layer a rated vest over it.
- Faded, torn or dirty garments lose their rating. Replace them.

Minimum areas per ANSI/ISEA 107-2020. Arc-flash and electrical crews: standard hi-vis polyester is not flame resistant.

HI-VIS APPAREL // WHAT WE CARRY

Only the FrenchCreek VIZ vest carries an ANSI/ISEA 107 rating in this group. The shirts and headband are labeled so you can tell them apart.



FRENCHCREEK

VIZ // HI-VIS FALL PROTECTION VEST

ANSI 107 **TYPE R** | CLASS **2**

- Worn over a harness — back and side openings let the D-rings pass through
- 2 in reflective striping on a 3 in contrasting band
- Solid polyester front, mesh back, snap front. 0.3 lb

ITEM # VO-FC-VIZ



MALTA DYNAMICS

HI-VIS LONG SLEEVE WORK SHIRT // 3-PACK

ANSI 107 **NOT RATED**

- Non-ANSI hi-vis work shirt: fluorescent yellow for daylight visibility
- No retroreflective striping — wear a Class 2 or 3 vest over it near traffic
- Crew neck, chest pocket; three shirts per pack

SIZES S | M | L | XL | 2XL

ITEM # VO-VSG-SHL0013-S / -M / -L / -XL / -2XL



MALTA DYNAMICS

HI-VIS SHORT SLEEVE WORK SHIRT // 3-PACK

ANSI 107 **NOT RATED**

- Non-ANSI hi-vis work shirt: fluorescent yellow for daylight visibility
- No retroreflective striping — layer a rated vest over it in the right-of-way
- Crew neck, chest pocket; three shirts per pack

SIZES S | M | L | XL | 2XL

ITEM # VO-VSG-SHS0012-S / -M / -L / -XL / -2XL



ARTEX

CLASSIC HI-VIS HEADBAND

LINING **THINSULATE**

- Hi-vis knit headband with 3M Thinsulate insulation
- Keeps ears warm under a hard hat on winter call-outs

ITEM # VO-LM-111473

THREE GLOVES, THREE JOBS // GROUND CREW, PROTECTOR, INSULATING

They can all be leather on the outside. Only one kind is rated to insulate against voltage. Know which glove you are ordering.



GROUND-CREW WORK GLOVES

Cut, impact, puncture and cold-weather gloves for digging, rigging, pipe and material handling. Ratings are ANSI/ISEA 105 cut and puncture, ANSI/ISEA 138 impact.

VOLTAGE RATING: None. Not for energized work.



LEATHER PROTECTORS

Heavy leather gauntlets sized to fit over rubber insulating gloves. Carolina Glove 6010 / 6011 meet ASTM F696.

VOLTAGE RATING: None on their own. Always worn over a rubber insulating glove of the right class.

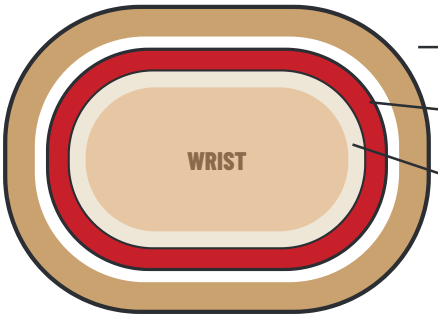
RUBBER INSULATING GLOVES

ASTM D120 gloves are the voltage-rated layer. The class label color tells you the maximum use voltage. Size them so the protector fits over the top.

VOLTAGE RATING: By class, as labeled. Issued and retested under your utility's glove program.

CLASS 00	500 V AC max use
CLASS 0	1,000 V AC max use
CLASS 1	7,500 V AC max use
CLASS 2	17,000 V AC max use
CLASS 3	26,500 V AC max use
CLASS 4	36,000 V AC max use

THE LINEMAN LAYERS // CUFF CROSS-SECTION, INSIDE → OUT



LEATHER PROTECTOR — ASTM F696. Guards the rubber. Does not insulate.

RUBBER INSULATING GLOVE — ASTM D120. The only layer that insulates.

LINER — optional cotton liner for sweat and cold.

OSHA 1910.137: air-test rubber gloves before each use; electrically retest before first issue and every 6 months.

ARC-RATED ≠ VOLTAGE-RATED

- Arc-rated gloves such as the HexArmor 5080 and 5081 (CAT 4) protect against the heat of an arc flash. They are not insulating gloves and offer no protection from contact with energized parts.
- Order protectors in the size of the rubber glove they go over (size 10 or 11 for the Carolina 6010 / 6011).

GLOVES BY JOB // PUBLIC WORKS & UTILITY CREWS

Start with the job, then the hazard, then the rating.

JOB	HAZARDS	LOOK FOR	VERTEX PICKS
REFUSE & RECYCLING	Broken glass, sharp metal and hidden sharps in bags; wet, slick bags; traffic and early-morning dark.	Puncture rating 4–5, A4+ cut, grippy palm, hi-vis back. Replace when the palm coating wears through.	**HexArmor IronHide 4091IMP** — Puncture 5 · A8 **Magid TRX743 Windstorm** — Puncture 4 · A6 **HexArmor Rig Lizard 2021X** — Puncture 4 · hi-vis **Carolina IKBLPD latex grip** — Wet-bag grip
WATER, SEWER & WASTEWATER	Sewage and wet work, chemicals at treatment plants, valve keys and pipe.	Liquid contact needs a liquid-proof gauntlet — a knit or leather glove is not a barrier. Add a cut liner where sharps are present.	**SpillTech nitrile, 15 mil, 13 in** — Liquid barrier **SpillTech neoprene, 14 in** — Chemical gauntlet **HexArmor 5071 OilGuard** — Oil/water resistant **Carolina IKBLPD latex** — Wet grip
STREETS, PIPE & PAVING	Rebar, pipe ends, saw cuts, asphalt and concrete abrasion, pinch points.	Impact back for knuckles, abrasion 4+, cut A4–A6.	**HexArmor Rig Lizard 2028X** — A6 · impact **Magid TRX814 Rebel** — A6 · goatskin **Armor Guys Kyorene Pro 00-857** — A5 · TPV **Carolina grain cowhide drivers** — General handling
WINTER CALL-OUTS & SNOW	Main breaks at night, plowing, salt and wet cold.	Insulated liner with a grip coating that stays flexible; hi-vis.	**HexArmor Helix 2059** — A4 · EN 511 **Armor Guys Extraflex 04-545** — A5 · cold **Armor Guys Extraflex 04-314** — A4 · insulated **Carolina hi-vis thermal latex** — Cold + grip
ELECTRIC UTILITY & LINEMEN	Energized lines, switching, arc flash, climbing and rigging.	Rubber insulating gloves (ASTM D120) with leather protectors; arc-rated gloves for arc hazards; durable leather for ground work.	**Carolina 6010 / 6011 protectors** — ASTM F696 **Bear Knuckles Prime Time SS644** — 40 cal/cm^2 **HexArmor 5081** — CAT 4 · 68 cal **Bear Knuckles Honeybadger GL338** — Ground lineman

ANSI/ISEA 105 CUT LEVELS AT A GLANCE

A1	A2	A3	A4	A5	A6	A7	A8	A9
200+ g	500+ g	1,000+ g	1,500+ g	2,200+ g	3,000+ g	4,000+ g	5,000+ g	6,000+ g

Higher A-level = more blade force needed to cut through. Puncture (1–5) and impact (ANSI/ISEA 138, levels 1–3) are rated separately — a high cut level does not mean puncture or needle protection. Full rating guides are in the Vertex PPE catalog.

GROUND-CREW GLOVES // CUT, IMPACT & COLD

Crew favorites for refuse, streets, pipe and winter work. Every rating is explained in the Vertex PPE catalog.



HEXARMOR

RIG LIZARD // 2021X

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT
A3	4	4	2	3

EN 388: 3X43BP

- Sewn-on IR-X impact exoskeleton protects knuckles and fingers from smash and pinch hazards
- TP-X palm with reinforced stitching grips wet or dry; reinforced index finger and thumb saddle
- Pre-curved, high-dexterity fit; hi-vis colorway, pull-tab loop, launderable

XS (6) | S (7) | M (8) | L (9) | XL (10) | XXL (11) | XXXL (12)

ITEM # VO-HEX-2021X-XS / -S / -M / -L / -XL / -XXL / -XXXL each as -Pr pair · -12P 12-pair pack · -36C 36-pair case



HEXARMOR

CHROME SERIES IRONHIDE // 4091IMP

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT
A8	5	6	2	2

EN 388: 4X44FP

- IronHide leather palm over a SuperFabric interior layer — our highest puncture rating
- OilGuard-treated leather; breathable HexVent back with impact protection
- SlipFit cuff with hook-and-loop closure; touchscreen index fingertip

XS (6) | S (7) | M (8) | L (9) | XL (10) | XXL (11) | XXXL (12)

ITEM # VO-HEX-4091IMP-XS / -S / -M / -L / -XL / -XXL / -XXXL each as -E pair



HEXARMOR

HELIX // 2059 HI-VIS WINTER

ANSI CUT	PUNCTURE	ABRASION	EN 388	EN 511
A4	2	4	3X42D	X2X

- 18-gauge cut-resistant shell with a warm fleece lining; 360° cut resistance
- 3/4 sandy nitrile palm keeps grip on cold, wet tools
- Hi-vis, touchscreen, seamless, elastic knit wrist; washable

XS (6) | S (7) | M (8) | L (9) | XL (10) | XXL (11) | XXXL (12)

ITEM # VO-HEX-2059-XS / -S / -M / -L / -XL / -XXL / -XXXL each as -12P 12-pair pack · -72C 72-pair case



CAROLINA GLOVE

GRAIN COWHIDE // DRIVER GLOVES

- Quality grain cowhide, keystone thumb and shirred elastic back for a secure fit
- I9999KTE unlined for everyday handling; IL9999KTE adds a red fleece lining for cool weather
- Color-coded hemmed cuff for quick size ID; sold in packs of 12

M | L | XL | XXL (unlined only)

ITEM # Unlined: VO-CG-I9999KTE-M / -L / -XL / -XXL -12P · Fleece-lined: VO-CG-IL9999KTE-M / -L / -XL -12P

PUBLIC WORKS WORK GLOVES // CUT, IMPACT & COLD

More of the crew lineup. Tiles show the tested ratings; sizes and pack options are on vertexoutfitters.net.



HEXARMOR

RIG LIZARD // 2028X

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT	EN 388
A6	1	4	2	3	3X43EP

HPPE/steel blend palm liner delivers A6 cut resistance under the grip layer

VO-HEX-2028X-XS / -S / -M / -L / -XL / -XXL / -XXXL



HEXARMOR

HELIX // 3026IMP

ANSI CUT	PUNCTURE	ABRASION	IMPACT
A7	2	3	2

Ultra-thin 21-gauge HPPE and metal-fiber shell gives 360° A7 cut protection

VO-HEX-3026-XXS / -XS / -S / -L / -XL / -XXXL



HEXARMOR

EXT RESCUE // 4012

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT	EN 388
A8	2	6	2	2	4X41FP

SuperFabric layer inside the palm and fingers resists cuts, lacerations and punctures

VO-HEX-4012-XS / -S / -M / -L / -XL / -XXL



HEXARMOR

CHROME SLT // 4072

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT	EN 388
A6	3	5	3	4X42F

360° A6 cut protection from an HPPE-blend liner, without impact bulk

VO-HEX-4072-XS / -S / -M / -L / -XL / -XXL / -XXXL



MAGID

T-REX FLEX // TRX400

ANSI CUT	PUNCTURE	ABRASION	IMPACT
A1	2	4	1

General-purpose impact glove: flexible TPR protection across the back of the hand, fingers and fingertips

VO-MAG-TRX400S / M / L / XL / XXL / XXXL



MAGID

T-REX FLEX // TRX685 AERODEX

ANSI CUT	PUNCTURE	ABRASION	IMPACT
A6	3	6	2

18-gauge AeroDex shell is about 50% lighter than HPPE with equal cut protection (manufacturer data)

VO-MAG-TRX685-S / -M / -L / -XL / -XXL



MAGID

T-REX WINDSTORM // TRX743

ANSI CUT	PUNCTURE	ABRASION	IMPACT
A6	4	4	2

Foam- and gel-padded goatskin palm with para-aramid cut protection

VO-MAG-TRX743XXS / XS / S / M / L / XL / XXL / XXXL / XXXXL



MAGID

T-REX REBEL // TRX814

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT
A6	3	3	2	2

Traditional goatskin driver with a stitched-in para-aramid liner

VO-MAG-TRX814XS / S / M / L / XL / XXL / XXXL / XXXXL



ARMOR GUYS

KYORENE PRO // 00-857

ANSI CUT	IMPACT	EN 388
A5	TPV	4443E

15-gauge Kyorene Pro graphene liner with A5 cut resistance

VO-AG-00-857-XS / -S / -M / -L / -XL / -2X / -3X / -S-M / -L-XL



ARMOR GUYS

KYORENE PRO MAX // 24-847

ANSI CUT	IMPACT	EN 388
A4	2	4X42D

Thin 24-gauge graphene liner for fine finger control — no steel or fiberglass

VO-AG-24-847-XS / -S / -M / -L / -XL / -2X



ARMOR GUYS

EXTRAFLEX // 04-545

ANSI CUT	EN 388	EN 511
A5	4443E	RATED

15-gauge cut liner over a 7-gauge poly-acrylic insulating lining

VO-AG-04-545-S / -M / -L / -XL / -2X / -3X / -S-M / -L-XL



ARMOR GUYS

EXTRAFLEX // 04-314

ANSI CUT	IMPACT	EN 388
A4	TPV	4443D

13-gauge cut liner around a 7-gauge poly-acrylic insulating lining

VO-AG-04-314-M / -L / -XL / -2X

WET, CHEMICAL & GRIP GLOVES // SEWER, PLANT & SANITATION

For liquid contact, wet handling and cold, slick work.



CAROLINA GLOVE

CAROLINA // IKBLPD LATEX GRIP

EN 388
3142

Hi-vis 10-gauge shell with textured latex palm — strong grip on wet bags, hoses and tools. Not a liquid barrier.

VO-CG-IKBLPD-XS / -S / -M / -L / -XL



CAROLINA GLOVE

CAROLINA // HI-VIS THERMAL LATEX

Thermal hi-vis shell with latex palm for winter collections and main breaks.

VO-CG-IKBLPDTLLCRC9-S / -M / -L / -XL / -XXL



HEXARMOR

CHROME SLT // 5071 OILGUARD

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT
A4	4	4	3

ARC FLASH **CAT 4**

Goatskin treated with OilGuard+ to resist oil and water saturation

VO-HEX-5071-XS / -S / -M / -L / -XL / -XXL / -XXXL



SPILLTECH NITRILE GLOVES

15 mil nitrile, 13 in gauntlet, textured grip. One pair. A liquid-proof barrier for sewage, fuel and many chemicals.

VO-SPT-A-GLV-NIT



SPILLTECH NEOPRENE GLOVES

16 mil neoprene, 14 in fully coated gauntlet with cotton liner. Size large. For chemical handling at treatment plants.

VO-SPT-A-GLV-NEO



SPILLTECH PERSONAL PROTECTION KIT

Outfits three responders: Tyvek coveralls, latex boots, nitrile gloves, goggles, disposal bags and an Emergency Response Guidebook.

VO-SPT-PPE-KIT

CHECK BEFORE YOU ORDER

- Knit, latex-dipped and leather gloves are not liquid barriers. Use a nitrile or neoprene gauntlet when hands contact sewage or chemicals.
- Check the chemical against the glove maker's resistance chart before use.
- For sharps and liquids together, wear a cut-resistant liner under the chemical glove.

LINEMAN GLOVES // PROTECTORS, ARC-RATED & GROUND

Leather protectors for over rubber, arc-rated lineman gloves for switching and energized-adjacent work, and tough leather for ground crews.



CAROLINA GLOVE

HIGH VOLTAGE LINEMAN // LEATHER PROTECTORS

ASTM **F696**

- Top-grain leather protectors worn over rubber insulating gloves to guard them from cuts, abrasion and punctures
- Two-piece vacuum-dried leather gauntlet with adjustable web strap and buckle
- Made in the USA; choose an orange or yellow rubberized gauntlet

SIZES 10 (6010) | 11 (6011) **COLORS** Orange Gauntlet / Yellow Gauntlet

ITEM # VO-CG-6010-ORG / -YEL (size 10) · VO-CG-6011-ORG / -YEL (size 11)



BEAR KNUCKLES

PRIME TIME // SS644 ARC LINEMAN

ANSI CUT	PUNCTURE	ABRASION	ARC FLASH
A6	4	4	40 CAL/CM²

F/R **YES**

Short-cuff buffalo lineman glove: ATPV 40 cal/cm² and flame resistant

VO-BK-SS644-S / -M / -L / -XL / -2XL



BEAR KNUCKLES

PRIME TIME 2 // SL644 ARC LINEMAN

ANSI CUT	PUNCTURE	ABRASION	ARC FLASH
A6	4	4	40 CAL/CM²

F/R **YES**

Long-gauntlet version of Prime Time: extra wrist and forearm coverage with the same 40 cal/cm² arc rating

VO-BK-SL644-M / -L / -XL



BEAR KNUCKLES

PERFECT STORM // SS545AFR ARC LINEMAN

ANSI CUT	PUNCTURE	ABRASION	ARC FLASH
A5	5	4	28 CAL/CM²

F/R **YES**

Short-cuff buffalo arc lineman glove: ATPV 28 cal/cm², flame resistant

VO-BK-SS545AFR-S / -M / -L / -XL / -2XL



BEAR KNUCKLES

PERFECT STORM 2 // SL545AFR ARC LINEMAN

ANSI CUT	PUNCTURE	ABRASION	ARC FLASH
A5	5	4	31 CAL/CM²

F/R **YES**

Long-cuff version of Perfect Storm: ATPV 31 cal/cm², flame resistant, extra wrist and forearm coverage

VO-BK-SL545AFR-M / -L / -XL



BEAR KNUCKLES

HAYMAKER // S390 LINEMAN

ANSI CUT	PUNCTURE	ABRASION	H2O
A6	4	4	RESIST

Water-resistant yellow cowhide safety lineman glove with a poly-aramid cut liner (ANSI A6)

VO-BK-S390-S / -M / -L / -XL / -2XL



BEAR KNUCKLES

HONEYBADGER // GL338 GROUND LINEMAN

New for 2026: a tough ground-lineman glove of double-drum-dyed buffalo hide with a long, soft split-cowhide gauntlet cuff

VO-BK-GL338-S / -M / -L / -XL / -2XL

Arc-rated lineman gloves (Prime Time, Perfect Storm) protect against arc heat — they do not insulate. Wear rubber insulating gloves with protectors for contact with energized parts. Protectors are sized to the rubber glove: size 10 (6010) or 11 (6011).

ARC-RATED GLOVES // HEXARMOR CHROME SLT

Arc rating (ATPV, cal/cm^2) is the heat energy the glove blocks. NFPA 70E categories: CAT 2 ≥ 8, CAT 4 ≥ 40 cal/cm^2. None of these gloves is voltage-rated.



HEXARMOR

CHROME SLT // 5080 ARC FLASH

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT	ARC FLASH
A1	4	4	2	CAT 4 (47 CAL)

- Unlined, water-resistant goatskin for a traditional feel — arc rated 47 cal/cm^2
- 3D finger construction for dexterity; goatskin abrasion patches
- Touchscreen middle fingertip; SlipFit cuff. Not a voltage-rated insulating glove

XS (6) | S (7) | M (8) | L (9) | XL (10)

ITEM # VO-HA-5080-XS / -S / -M / -L / -XL each as -E pair · -6P 6-pair pack · -12P 12-pair pack



HEXARMOR

CHROME SLT // 5081 ARC FLASH

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT	ARC FLASH
A4	4	4	3	CAT 4 (68 CAL)

- Water-resistant goatskin with aramid liner — 360° A4 cut and our highest arc rating, 68 cal/cm^2
- Form-fitting 3D fingers; reinforced goatskin palm patches
- Touchscreen middle fingertip; SlipFit cuff. Not a voltage-rated insulating glove

XS (6) | S (7) | M (8) | L (9) | XL (10) | 2XL (11) | 3XL (12)

ITEM # VO-HA-5081-XS / -S / -M / -L / -XL / -2XL / -3XL each as -E pair · -6P · -12P



HEXARMOR

CHROME SLT // 4060

ANSI CUT	PUNCTURE	ABRASION	IMPACT	CONT. HEAT	ARC FLASH	EN 388
A5	4	4	2	2	CAT 2 (23.6 CAL)	2X23EP

Goatskin leather palm with a full aramid liner for 360° cut resistance

VO-HEX-4060-XS / -S / -M / -L / -XL / -XXL / -XXXL / -XXXXL / -XXXXXL



HEXARMOR

CHROME SLT // 4061

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT	ARC FLASH	EN 388
A5	4	4	2	CAT 4 (46 CAL)	2X23E

Goatskin leather with aramid liner and aramid stitching — no impact guards, for rope work

VO-HEX-4061-XS / -S / -M / -L / -XL / -XXL / -XXXL



HEXARMOR

CHROME SLT // 5071 OILGUARD

ANSI CUT	PUNCTURE	ABRASION	CONT. HEAT	ARC FLASH
A4	4	4	3	CAT 4

Goatskin treated with OilGuard+ to resist oil and water saturation

VO-HEX-5071-XS / -S / -M / -L / -XL / -XXL / -XXXL

LINEMAN HEAD, FACE & HEARING KITS // ONE ITEM NUMBER

Class E helmet, face shield and helmet earmuffs packaged together, so the shield and muffs are matched to the helmet.



HEXARMOR

XT400E // LINEMAN HEAD, FACE & HEARING KIT

CLASS	ANSI	MUFFS
E	Z89.1	K1C/K2C

Type 2 Class E XT400E full-brim helmet (standard or Mips) with chin strap, TruSpan universal face shield and K1C (22 dB) or K2C (25 dB) earmuffs. 10 helmet colors.

ITEM # VO-HEX-LHPK-XT-[color]-K1C / -K2C (standard) · VO-HEX-LHPK-XTM-[color]-K1C / -K2C (Mips). Colors: BLK BLU GRN GRY HVO HVY ORG RED WHT YEL



HEXARMOR

XP450AE // HELMET, FACE SHIELD & EARMUFF KIT

CLASS	ANSI	MUFFS
E	Z89.1	K1C/K2C

Type 1 Class E XP450AE (standard or Mips) with chin strap, TruSpan face shield and K1C or K2C earmuffs. 10 helmet colors.

ITEM # VO-HA-XP450AE-STD-K1C / -K2C-[color] · VO-HA-XP450AE-MIPS-K1C / -K2C-[color]. Colors: BLK BLU GRN GRY HVO HVY ORG RED WHT YEL

CHECK BEFORE YOU ORDER

- K1C muffs are rated 22 dB NRR; K2C 25 dB NRR — pick by the noise of the job (chainsaws, chippers, jackhammers).
- Mips versions add a low-friction layer for angled impacts.
- Class E helmets are proof-tested to 20,000 volts. They do not replace other electrical PPE.

HEAD, EYE & HEARING // CREW PICKS

Class E helmets for electrical work, eyewear that fits under them, and hearing protection for saws, jackhammers and vac trucks.



HEXARMOR CEROS XT400E

Type 2, Class E full-brim helmet — ABS shell with EPS liner for top, front, rear and side impacts. 10 colors; Mips option.

VO-HEX-16-31001 ... 31010 (-E / -20C) · Mips: -M



HEXARMOR CEROS XP300E

Type 1, Class E non-vented full brim with 360° rain lip. Made in the USA. 10 colors.

VO-HEX-16-23001 ... 23010 (-E / -20C)



HEXARMOR MX300 SAFETY GLASSES

Z87+ wraparound with brow guard; TruShield anti-fog. Clear, amber, grey and 2SF lenses.

VO-HEX-11-13001-02 (clear) ... 6 lenses



HEXARMOR MX350 GASKETED

Glasses with a soft seal and strap; D3/D4 splash protection with airflow.

VO-HEX-11-23001-04



HEXARMOR MX500 GOGGLE

Indirect-vent goggle with soft seal; low profile under a hard hat.

VO-HEX-12-12001-02 ... 12-12005-02



HEXARMOR K-SERIES EARMUFFS

Over-the-head muffs: K1 23 dB, K2 26 dB, K3 30 dB NRR.

VO-HEX-19-10001 / 10002 / 10003 (-Pr / -20C)



HEXARMOR CEROS K1C / K2C HELMET MUFFS

Slot-mount muffs for Ceros helmets: 22 / 25 dB NRR.

VO-HEX-17-15001 / 16001 (-Pr / -20C)



HEXARMOR ACCUFIT EARPLUGS

Slow-recovery foam in three sizes, 30–33 dB NRR. 300-pair boxes.

VO-HEX-18-10003-E / 11003-E / 12003-E

FOR ELECTRICAL CREWS

- Class E helmets are proof-tested to 20,000 volts (ANSI/ISEA Z89.1). Vented Class C helmets offer no electrical protection.
- Choose Type 2 (XT400E) when side and rear impacts are a hazard — working around equipment, in trenches and vaults.

LINEMAN FALL PROTECTION // HARNESSES, LANYARDS & CLIMBERS

Utility harnesses with no metal above the waist, dielectric and arc-rated options, and the hardware that goes with them.



FRENCHCREEK 630UT UTILITY HARNESS

No metal above the waist; sliding dorsal web loop, buckle insulators, sub-pelvic strap. Hi-vis yellow. 400 lb.

VO-FC-630UT-S / -M / -L / -XL / -2XL



FRENCHCREEK AF390AK ARC FLASH LANYARD

6 ft single-leg shock-absorbing lanyard; Kevlar, FR cover. Fabric 8.6 cal/cm^2 (ASTM F1959).

VO-FC-AF390AK



FRENCHCREEK AF390AKDLZ DUAL-LEG LANYARD

6 ft dual-leg arc flash lanyard for 100% tie-off.

VO-FC-AF390AKDLZ



FRENCHCREEK 400BC BUCKLE COVERS

Insulated arc-flash harness buckle covers, 8.6 cal/cm^2.

VO-FC-400BC



FRENCHCREEK 400SC-FR STRAP COVERS

Flame-resistant harness strap covers, 8.6 cal/cm^2.

VO-FC-400SC-FR



EDELRID TALON CLIMBING GAFFS

Short-gaff pole climbers; shanks 14–18 in, calf 13–19 in.

VO-VSG-40469



FRENCHCREEK 470 POSITIONING LANYARD

6 ft vinyl-coated wire rope lanyard for work positioning only.

VO-FC-470



ERGODYNE SQUIDS 3405 GLOVE CLIP

Belt clip keeps protectors and gloves off the ground. 6-pack.

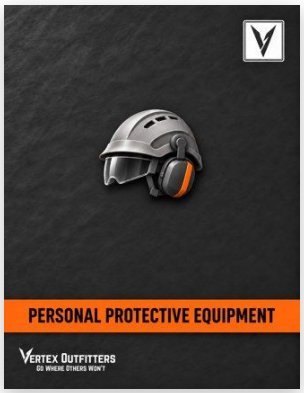
VO-ORS-3405-BLK / -BLU / -GRA / -LIMGRN / -ORG / -RED

ARC RATINGS ON FALL PROTECTION

The FrenchCreek AF-series lanyards and 400-series covers use fabric rated 8.6 cal/cm^2 (ASTM F1959, NFPA 70E CAT 2). Match harness, lanyard and covers to the arc rating your hazard assessment calls for. Arc-flash and FR harnesses (Malta Flash Hog, Yates 390FRA, FrenchCreek AF630K-DE and 631KUT) are on page 13.

MORE FROM VERTEX // COMPANION CATALOGS

Two catalogs that pick up where this one leaves off.



VERTEX OUTFITTERS

PERSONAL PROTECTIVE EQUIPMENT CATALOG

Every glove, hard hat, earplug, earmuff and pair of safety glasses we carry — with full rating tiles, color and size runs, and guides to ANSI cut levels, helmet types and classes, NRR and lens markings. Includes Carolina Glove lineman protectors, arc-rated gloves, the HexArmor Ceros helmet range and lineman and arborist head-protection kits.



VERTEX OUTFITTERS

SPILL RESPONSE CATALOG

Absorbents, spill kits, socks, pads, booms and drain protection for fuel, hydraulic oil and chemical spills — the gear for a ruptured hydraulic line on a backhoe, a fuel leak at the yard or a storm-drain inlet near a main break.

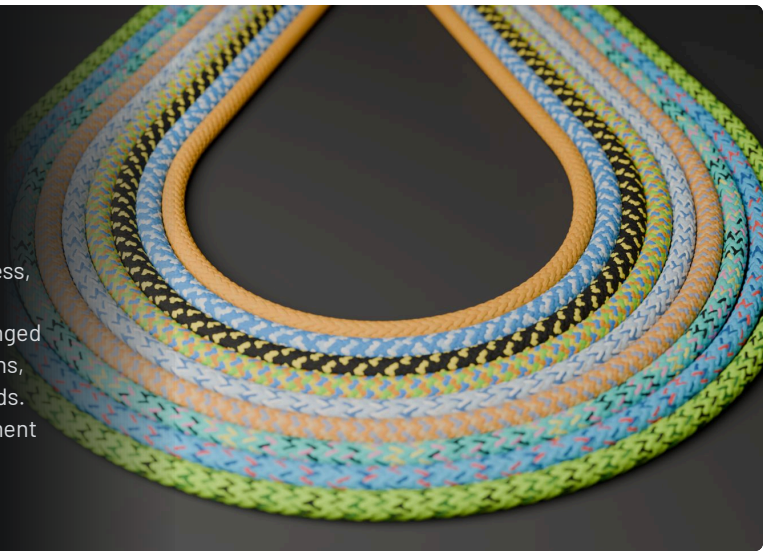
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VERTEX OUTFITTERS · TRAINING

TRAINING COORDINATION

Vertex Outfitters coordinates specialized safety, rope access, and technical rescue training through qualified training providers and experienced instructors. Programs are arranged according to customer requirements, existing qualifications, operational responsibilities, and applicable safety standards. Vertex also assists organizations with sourcing the equipment needed for training and field operations.



FALL PROTECTION & RESCUE AT HEIGHT

- OSHA-aligned fall protection training and practical workshops
- Rescue-at-height skills and emergency response procedures
- Customized workshops for personnel working at height, within their existing qualifications and responsibilities

CONFINED SPACE ENTRY & RESCUE

- OSHA-aligned confined space rescue training
- Practical confined space rescue workshops
- Confined space rope rigging and rescue techniques

TECHNICAL ROPE RESCUE

- NFPA 1006 technical rescue operations and technician-level programs
- Personal rope rescue skills training
- Rope techniques involving aerial ladders
- Customized technical rescue programs and practical skills workshops

SPRAT ROPE ACCESS TRAINING

- SPRAT rope access training and evaluation
- Training conducted at a specialized facility in Rhode Island
- Courses coordinated through qualified rope access instructors and independent evaluators
- Training at other locations may be arranged separately through qualified providers

PPE INSPECTION & EQUIPMENT TRAINING

- Competent PPE Inspector training
- Inspection procedures and equipment familiarization
- Manufacturer-specific equipment training and practical applications
- PPE Inspector training available at a Rhode Island training center or an appropriate customer location
- Competent Inspector certificates issued by KONG Italy

SPECIALIZED TRAINING

- Potential specialized instruction involving advanced rescue equipment and techniques through international manufacturer instructors
- Program availability, instructional scope, and location subject to individual coordination and confirmation

TRAINING COORDINATION & EQUIPMENT SUPPORT

Vertex Outfitters works with customers to identify training objectives, coordinate qualified instructors and training providers, and source associated safety and rescue equipment. Training content, prerequisites, certifications, locations, scheduling, and pricing are confirmed for each engagement. Training and certifications are delivered by qualified external providers, not Vertex Outfitters.

301-246-2336 **info@vertexoutfitters.net** **vertexoutfitters.net**

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