



2026-27 SEASON EDITION

THE COMPLETE GUIDE TO

CUT PROTECTION FOR SKI RACERS

What every coach, racer, and parent needs
to know this season.

- Why lacerations happen – and how protection works
- What the 2026–27 rules actually require
- How to compare layers and prepare the team

VIX PROTECTION · [VIXPROTECTION.COM](https://vixprotection.com)



WHAT CUT PROTECTION IS **BUILT TO PREVENT**

A ski laceration usually starts with an ordinary fall. A binding releases, a ski flips or crosses underneath the racer, and a sharpened steel edge meets an unprotected leg.

The consequences can range from stitches and missed training to surgery, lasting damage, or a life-threatening bleed.

1 in 7

An estimate of how many ski racers will experience a laceration during their career.

STANDARD GEAR ISN'T CUT PROTECTION

Race suits, ski pants, and ordinary base layers are built for speed, warmth, moisture management, and abrasion – not a sharpened ski edge. A racer can be fully equipped and still have no tested cut resistance between the edge and skin.

WHAT CHANGES WITH A PROTECTIVE LAYER

ORDINARY SKI CLOTHING

BUILT FOR THE MOUNTAIN

Designed for aerodynamics, warmth, moisture, and abrasion. It isn't tested against the cutting force of a ski edge.

CUT-RESISTANT BASE LAYERS

BUILT FOR THE EDGE

Worn next to the skin under the race suit. Protective fibers resist and spread the cutting force before the edge reaches skin.

Certified layers don't make a racer invulnerable. They're specifically designed to prevent the kind of lacerations ordinary ski clothing can't. That preventable risk is why FIS created the first new mandatory safety-gear category across alpine disciplines since helmets.

WHAT THE 2026-27 FIS RULES REQUIRE

Starting in **2025–26**, FIS made certified cut-resistant undergarments mandatory at Level O–1 events. That requirement continues for 2026–27.

Here's who it covers, what qualifies, and what younger racers need to check.

WHO MUST WEAR IT

At FIS Level **O–1** events – including World Cup, Continental Cup, Olympics, and Junior Worlds – racers must wear FIS–DITF 2021–certified undergarments with at least **3 stars** of protection.

The layer must cover from the iliac crest (top of the hip) to the top of the ski boot and carry a non-removable conformity label on the back of the lower left leg.

RATING	CUTTING FORCE	WHAT IT MEANS
1 star	100N	Below mandate minimum
2 stars	200N	Below mandate minimum
3 stars	300N	Mandate minimum
4 stars	400N	Above minimum
5 stars	500N	Maximum available

FIS strongly recommends cut-resistant gear for every discipline and level.

For most U10–U16 racers, the FIS mandate doesn't automatically apply. But national federations, clubs, and academies can set their own requirements, so confirm the rule that applies to your racer.

NATIONAL REQUIREMENTS, 2026-27

FEDERATION	CURRENT DIRECTION
Italy (FISI)	Requires 3-star protection for ages 6+ through Masters
France (FFS)	Required for junior categories and expanding to younger ages; verify the current rule for your class
USA (USSS)	Strongly recommended; no mandate beyond FIS requirements as of this writing
Canada (ACA)	Strongly recommended at all levels; aligns with FIS

CHECK YOUR LOCAL RULE

Clubs and academies may set their own rules, and requirements change every season. Verify with your club and federation before buying or traveling.

HOW TO CHOOSE CUT PROTECTION

Start with the standard, not the logo.

WHAT THE FIS RATING ACTUALLY MEASURES

SKI-SPECIFIC FIS-DITF tests fabric against a standardized cutting blade under controlled force.	EVERY DIRECTION COUNTS Fabric is tested at 0, 45, and 90 degrees. The weakest direction determines the rating.	4 OF 5 MUST PASS One strong sample isn't enough. Four of five must withstand the required force.
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For an FIS-level layer, look for three things:

01 CERTIFICATION At least 3-star FIS-DITF 2021 certification.	02 THE LABEL Non-removable, on the back of the lower left leg.	03 COVERAGE From the iliac crest to the top of the ski boot.
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EN388 and ANSI aren't FIS compliance standards. A familiar name or a tough-sounding material doesn't necessarily mean a layer passes.

HOW THE MAIN BRANDS COMPARE

BRAND	FIS STARS	PRICE	MEETS 3-STAR MINIMUM?
VIX	5 stars	\$449	Yes
DISTON	5 stars	\$545	Yes
Energiapura	4 stars	\$320	Yes
Shred Iron-IC	3 stars	\$350	Yes
Sync	2 stars	\$449	No – below FIS minimum
POC	EN388 only	\$330	No – no FIS certification

Prices are listed in USD. Product details were checked in August 2026; verify current certification and pricing before buying.

DISTON, Energiapura, and Shred are legitimate options at their listed protection levels. A certified 3-star layer meets the FIS minimum; higher ratings mean the fabric withstood more cutting force in the standardized test.

THE HONEST ANSWER

Once a layer passes the certification, coverage, and label checks, there isn't one right choice for every racer. Protection level, comfort, fit, and price are how you choose among the options.

The table tells you which layers qualify. The next question is which one a racer will actually want to wear.

WHY RACERS CHOOSE VIX

75% of World Cup racers wore VIX in the 2025-26 season.



VIX is one of two products in the table with the maximum 5-star rating. What separates it isn't the rating alone. It's the combination of maximum-rated protection, comfort, and adoption by racers who wear it every day.

MAXIMUM-RATED PROTECTION

VIX was the first brand to achieve **5-star FIS certification**. DISTON now shares that rating, so five stars are proof of excellence, not the differentiator by themselves.

COMFORT RACERS NOTICE

Protection only works on the days it's worn. VIX spent years making protective fabric feel like a regular base layer: snug, flexible, and easy to forget under a race suit.

"VIX leggings are by far the most cut-resistant and comfortable product out there. Athletes only stay safe if they wear it every time and with VIX, once the fit is right, they never take it off."

- SASHA REARICK, HEAD COACH, APEX2100 INTERNATIONAL SKI ACADEMY

PROTECTION IN THE REAL WORLD

VIX combines UHMWPE fibers with stainless steel wire. UHMWPE is the polymer family used in body armor and is **up to 15x stronger than steel by weight**. The fibers catch and distribute the edge's force across the knit, while the wire adds a physical barrier between the ski and skin.

"My ski cut through everything, except for my VIX leggings. If I hadn't worn VIX I would've had a deep cut in my thigh and probably missed several races."

- ATLE LIE MCGRATH, NORWEGIAN WORLD CUP ALPINE SKI RACER

FIT, BRIEFLY

VIX should fit snug, not tight, with full range of motion. Measure waist, hip, and inseam, then use the sizing guide linked on page 8. If you're between sizes, size up. VIX offers **90-day returns** and free sizing exchanges.

DO YOU NEED IT? THE QUESTIONS THAT MATTER

Q - “If the rule doesn’t apply, is it still necessary?”

The mandate settles the question for FIS Level 0–1 racers. Everyone else is making a risk decision. Most racers won’t experience a serious laceration, but cuts happen in training, at younger levels, and outside FIS events. Check the local rule, then weigh exposure, potential severity, and budget.

Q - “Training too, or just race day?”

Lacerations don’t only happen in races. Some coaches and academies require cut-resistant layers for training as well. Racers spend more days training than racing, making training the more likely setting for an incident.

Q - “Will it be hot or restrict movement?”

That depends on the brand. Comfort is where cut-resistant layers differ most, and some genuinely do feel like chain mail. VIX is designed to wear like a regular base layer: snug, not tight, with full range of motion. Other products will feel different, so try the layer before race week.

Q - “Is the cost worth it for a growing racer?”

That depends on budget, how long the layer will fit, and whether it can be passed on. VIX Youth covers a range of builds, and VIX leggings often move through race programs the way suits and helmets do. VIX also offers 90-day returns and free sizing exchanges if the first size isn’t right.

Q - “How long does a layer last?”

With proper care, expect **2–4 seasons for VIX**. Replace it if wire pokes through, the fit becomes loose, or a crash causes visible damage. A compromised layer can’t be repaired. For care specifics, see the product page or email info@vixprotection.com.

Q - “What’s the difference between cut-resistant and cut-proof?”

Cut-resistant means the fabric has been tested to resist a measurable cutting force. Cut-proof suggests complete protection, which isn’t physically possible. Even a **5-star** layer can be cut with enough force, the right angle, or repeated contact.

WHY VIX EXISTS

Everything in this guide – the test, the star ratings, and the focus on protection racers will actually wear – traces back to what Victor Wiacek couldn't find after his own injury.

Victor, a former college racer and the founder of VIX, was on a routine training run in **2019** when his binding released and he landed on the side of his ski. The edge sliced through his thigh, cutting through muscle, nerves, and his IT band, and nicking his femoral artery.

"The only reason I survived, frankly, was because there was someone on the side of the hill within 30 feet of me who had medical training as well as a tourniquet on them. They slapped it on my leg within two minutes. Despite that, I still lost half the blood in my body."

– VICTOR WIACEK, QUOTED BY AP (PAT GRAHAM), MARCH 24, 2025

He spent **two months** in a wheelchair.

When he was ready to return to snow, Victor bought every cut-resistant legging he could find. But there was no ski-specific certification proving any of them could withstand the forces of a real crash, so he built the world's first ski-specific cut-resistance testing machine to find out.

None of the existing options proved strong enough. He couldn't get back on skis knowing the same injury could happen again, so he decided to make his own.

After **387 fabric combinations and 29 testing machines**, he had the first version of VIX: a cut-resistant undergarment that gave him peace of mind without changing how he skied. He still never skis without it.

FROM PROBLEM TO STANDARD

Victor also worked with FIS to create what had been missing when he went shopping: an industry standard for measuring ski-specific cut resistance. That became the **FIS-DITF 2021** test – the same standard today's mandate uses.

THE MISSION

"THIS IS THE ONLY INJURY IN OUR SPORT WE CAN ELIMINATE."

VIX exists to make that possible without changing how racers ski. Whether you choose VIX or another certified layer, the goal is the same: make cut protection as routine as a helmet, on race day and in training. If you want help comparing options, understanding a rule, or getting the fit right, email info@vixprotection.com. We'll help whether or not you end up choosing VIX.

THE PRE-SEASON CHECKLIST

Six things to check before the 2026–27 season.

- 1 Check the competition level.** At FIS Level **0–1** events, a minimum **3–star** layer with coverage from the iliac crest to the top of the ski boot is mandatory. At other levels, verify the current rule with your club and federation.
- 2 Confirm the certification.** Look specifically for FIS–DITF 2021 certification. EN388 and ANSI aren't substitutes.
- 3 Find the label.** The conformity label must be non-removable and located on the back of the lower left leg.
- 4 Choose the protection level.** A certified 3–star layer meets the FIS minimum. Higher stars mean the fabric withstood more cutting force in the standardized test.
- 5 Get the fit right.** If you're choosing VIX, measure waist, hip, and inseam, use the current sizing guide, and size up if you're between sizes.
- 6 Leave time before race week.** VIX fabric softens after **2–3 washes**. Don't wait until equipment check to discover a rule, label, or fit problem.

If anything is unclear, ask the club before travel. Coaches should share the checklist early enough for racers to choose and try the gear.

FOR THE LATEST

Rules, certification, and product information can change. Use these links for the latest details.

CURRENT RULES	vixprotection.com/blogs/articles/fis-cut-resistant-mandate
CERTIFIED LAYERS	vixprotection.com/pages/shop
SIZING GUIDE	vixprotection.com/blogs/articles/sizing-guide
QUESTIONS	info@vixprotection.com

Check the rule early and leave time for sizing.

STAY SAFE AND SEE YOU ON THE SLOPES!