

Ski Racing Equipment Guide

Ski sizing, boots and protective equipment for every stage

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More references: height check p.14, development pathways pp.15-16, sources p.17.

How to use this guide

Start with your athlete's section: Age groups use age on December 31, 2026. The birth years shown are the clearest check. Use the FIS section when entering FIS races. High school-only racers should also confirm their school or league rules.

Use the size chart as a starting point: Weight, height, strength and current skiing ability all matter. Your coach reconciles these with the athlete's longer-term plan. The original sizing models can point to different lengths.

Check the actual ski before buying: Confirm the exact model, model year, length and printed radius. A different length of the same model may have a different radius or construction.

Recognize the labels: Race rule means a requirement for the named event. Pinnacle expectation identifies a club recommendation or requirement as labeled. Recommended means a useful purchase, with timing set by the coach.

SL = slalom. GS = giant slalom. SG = super-G. DH = downhill. Ski lengths are centimeters (cm), radius is meters (m), and body weights are pounds (lb).

Pinnacle clothing policy. Cut-resistant lower-body clothing is recommended at U14 and required at U16 and older, per Director guidance.

Prepared October 11, 2026. Sources: [USSS 2027 Equipment](#), [Alpine Ontario 2026-27](#), [Gearpass](#), [FIS Oct 2026](#) and Derek Delzer's original Pinnacle sizing deck.

U10 and younger

Born 2017 or later / Ages 9 and younger

One manageable multi-event ski is the normal starting setup. Prioritize balance, turning and confidence before adding specialized pairs.

Pinnacle starting points by weight

Group	Weight (lb)	Multi-event ski (cm)
U8 / younger	40-50	110
U8 / younger	50-60	120
U8 / younger	60-70	127
U8 / younger	70-80	134
U10	50-60	120
U10	60-70	130
U10	70-80	134 / 141
U10	80-90	148

Original Pinnacle reference sizes. Choose a similar current model only after checking height and manageable flex. Very young or small beginners may need a shorter recreational ski outside these examples.

Which ski? An easy-flexing junior multi-event or combo race ski. A second race pair is generally unnecessary at this stage.

Next step: Learn to make varied turns on the same ski. Move to separate SL and GS skis when the program and the coach call for it.

U.S. Ski & Snowboard race rules

The 2027 guidance recommends one size-appropriate multi-event pair for U10.
The equipment sheet gives no numeric U10 ski-length or radius minimum.
A certified event-appropriate helmet, working ski brakes and nonmetal pole baskets are required.
A slash means alternative model sizes, not a requirement to own both. Weight bands are approximate and overlap at the endpoints. Use a coach-led fitting outside the chart's range.

Sources: Derek Delzer, original Pinnacle sizing deck, slide 11. [USSS 2027 Equipment, pp.3-4](#); [2027 Alpine Guide age table, p.20](#). All lengths cm; weights lb.

U10 and younger: equipment

Born 2017 or later

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings

Fit first

Choose junior boots with secure heel hold and a cuff the child can flex. Current Gearpass examples include 65-flex junior boots for some 50-90 lb U10 racers, while smaller beginners may need softer boots. A shop must fit boots and set/test compatible bindings.

Helmet and goggles

Race rule

Certified ski helmet with a snug fit and goggles that fit the opening. USSS allows soft ears for U10 GS. A hard-ear race helmet is a useful Pinnacle recommendation. No camera or camera mount in official training or racing.

Gate protection

Coach timing

Shin guards, pole/hand guards and a compatible SL chin guard become useful as gate contact develops. Buying early is fine. Have them ready when the coach asks. Use the chin guard only for SL.

Body protection

Recommended

Consider a correctly fitted back protector. Cut-resistant lower-body clothing is optional at this age in the domestic guidance. It does not replace warm layers.

Clothing and race suit

Everyday kit

Warm jacket and pants, base layers, ski socks and waterproof gloves or mittens. A race suit can wait while skills develop. Bring spare gloves and an appropriate goggle lens for night training.

Poles and ski care

Race rule + care

Sized poles with nonmetal baskets, working ski brakes and labeled gear. Use fluorocarbon-free wax. For USSS U14-and-younger races, finish waxing before arriving at the resort.

Buying priority

First purchases: a good boot fit, suitable skis with serviced bindings, and a correctly fitted helmet. The coach will tell you when protection for gate contact becomes necessary.

A shop should measure both feet and check shell fit, cuff height and heel hold. Avoid buying extra boot length simply for growth.

Sources: [USSS 2027 Equipment, pp.3-4](#); [Skiis & Biikes / Gearpass, 2027 age/weight examples](#). Pinnacle recommendations: Director guidance. Product examples checked 11 Oct 2026.

U12

Born 2015-2016 / Ages 10-11

Plan for a junior slalom pair and a junior giant slalom pair as the athlete learns the differences between the events. Keep both skis manageable.

Pinnacle starting points by weight

Weight (lb)	GS ski (cm)	SL ski (cm)
60-70	135	128
70-80	144	135
80-90	151	135 / 142
90-100	158	142
100-110	165	149

Lengths come from Derek's junior sizing chart. Current models use different increments. Coach approval should consider height, skill, the ski's flex and the next season's needs.

Which skis? Junior race construction appropriate to the athlete's weight. Ask the coach before choosing an adult race ski or stiff plate.

Budget decision: If beginning with one pair, let the coach choose the best temporary setup. A separate speed ski is a coach decision tied to the actual camp or event.

U.S. Ski & Snowboard race rules

The 2027 guidance recommends SL and GS pairs with athlete-appropriate lengths. Only one pair may be inside the race arena for inspection and competition. This equipment sheet gives no numeric U12 ski-length or radius minimum.

A slash means alternative model sizes, not a requirement to own both. Weight bands are approximate and overlap at the endpoints. Use a coach-led fitting outside the chart's range.

Sources: Derek Delzer, original Pinnacle sizing deck, slide 11. [USSS 2027 Equipment, pp.3-4](#); [2027 Alpine Guide age table, p.20](#). All lengths cm; weights lb.

U12: equipment

Born 2015-2016

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings Fit first	Fit the foot and the athlete first. Current Gearpass examples: about 65 flex at 70-80 lb, 70 at 80-100 lb, and 90 at 100-110 lb. These are brand ratings, not rules. A shop checks fit and sets/tests compatible bindings.
Helmet and goggles Race rule	Use a certified hard-ear ski-racing helmet for GS and Kombi. USSS does not yet require the FIS RH 2013 label at U12, but a labeled race helmet can serve later seasons if it still fits. Soft ears are allowed in SL, not parallel SL.
SL gate protection Coach timing	Plan for shin guards, pole/hand guards and a compatible chin guard as the athlete progresses into gate contact. These can be purchased early. When the coach asks for them, be ready to add them.
Body protection Recommended	A well-fitted back protector is recommended. Cut-resistant pants are an optional early purchase for domestic U12 racing. Padded shorts or a padded top can help when contact increases.
Race suit and layers Recommended	A race suit is useful for regular racing, with warm layers and jacket/pants for training and waiting. Include spare gloves, ski socks and a lens suitable for local night training.
Poles and ski care Race rule + care	Use poles with nonmetal baskets, functional ski brakes and fluorocarbon-free wax. No helmet cameras or mounts. USSS U14-and-younger rules prohibit waxing on resort property at competitions.

Buying priority

A junior ski that the athlete can bend is a better starting purchase than a larger ski selected only to last longer. Ask the coach which pair needs replacement first.

A shop should measure both feet and check shell fit, cuff height and heel hold. Avoid buying extra boot length simply for growth.

Sources: [USSS 2027 Equipment, pp.3-4](#); [Skiis & Biikes / Gearpass, 2027 age/weight examples](#). Pinnacle recommendations: Director guidance. Product examples checked 11 Oct 2026.

U14

Born 2013-2014 / Ages 12-13

Use separate SL and GS skis. U14 is the first major domestic equipment checkpoint: the SL length and GS radius rules apply to every athlete, including the smallest racers.

Pinnacle starting points with current rule checks

Weight (lb)	GS ski (cm)	SL ski (cm)
70-80	152-158*	135
80-90	152-158*	135
90-100	158	135 / 142
100-110	165	142
110-120	170	142 / 150

*The two lightest GS rows replace older lengths with current examples that reach 17 m. The coach must confirm manageable flex. The old 128 cm SL option has been removed. Above/below these weight bands, ask for an individual selection.

Current 17 m examples: Atomic Redster G9 FIS Revoshock S J-RP3: 152 cm / 17 m. HEAD WC e.GS Rebel Team: 156 cm / 17 m. Rossignol Hero Athlete GS Pro R21 Pro: 158 cm / 17 m. These are radius-compatible examples for coach review.

Speed training: Ask the coach whether the planned camp or race needs a separate SG ski. A U14 domestic speed ski must still have at least a 17 m radius.

U.S. Ski & Snowboard race rules

- SL:** at least 130 cm. No SL radius minimum.
- GS:** at least 17 m radius. No specified GS length limit in this domestic sheet.
- SG/DH:** at least 17 m radius. No specified length limit.
- Ski/plate/binding stand height:** 50 mm max. Sole-to-footbed boot height: 43 mm max.

A slash means alternative model sizes, not a requirement to own both. Weight bands are approximate and overlap at the endpoints. Use a coach-led fitting outside the chart's range.

Sources: Derek Delzer, slide 12, updated as noted. [USSS 2027, p.2](#). Current examples: [Atomic 2026-27, p.6](#); [HEAD 26/27, p.1](#); [Rossignol 2026-27, p.5](#). Coach review required.

U14: equipment

Born 2013-2014

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings

Fit first

Current Gearpass examples: about 65 flex at 70-80 lb, 70 at 80-100 lb, 90 at 100-110 lb, and 110 at 110-120 lb. Choose by foot fit and controlled ankle flex. These nominal ratings are examples, not prescriptions.

GS/speed helmet

Race rule

A FIS-standard hard-ear helmet with the RH 2013 label is required for USSS GS, SG, DH and Kombi. The full 2027 Guide also includes parallel. Soft-ear SL helmets are permitted for SL.

SL gate protection

Coach expectation

Have shin guards, pole/hand guards and a compatible SL chin guard ready for full-gate training. Your coach determines when to use them. Remove the chin guard for GS/speed as directed by the manufacturer.

Cut-resistant pants

Pinnacle recommends

Pinnacle recommends cut-resistant lower-body clothing at U14. Choose a properly fitted product. International FIS youth events require compliant three-star pants now, and FIS youth ski rules apply. Cut-resistant does not mean cut-proof.

Back protector and suit

Recommended

Use a fitted back protector and a race suit appropriate to regular competition. Padded layers and GS arm guards depend on gate contact and coach advice. Keep warm outer layers available.

Daily kit and ski care

Race rule + care

Goggles, gloves, base layers, ski socks and sized poles. Brakes must work and baskets cannot be metal. No helmet cameras/mounts. Use fluorocarbon-free wax and finish waxing before arriving for a USSS U14 race.

Buying priority

Before buying a used GS ski, check the radius printed for that exact length. Short junior GS skis can look right for the athlete while falling below the 17 m minimum.

Sources: [USSS 2027 Equipment, p.4](#) and [Alpine Guide, pp.148-151](#); [Gearpass 2027 examples](#); [FIS Oct 2026, pp.29-35](#). Pinnacle cut-clothing policy: Director guidance.

U16

Born 2011-2012 / Ages 14-15

Select SL and GS skis for the athlete's current strength and development plan. Add an SG pair when it is part of the race or camp plan. Discuss the future FIS transition with the coach.

Pinnacle starting points by weight

Weight (lb)	GS ski (cm)	SL ski (cm)
90-100	165	142
100-110	170	149
110-120	175	150
120-130	182	157
130-150	182*	157*
Outside these bands	Individual fit	Individual fit

*This keeps the documented portion of Derek's older 130-150+ row. It is not a limit or a prescription for every heavier racer. Actual model length, stiffness and radius need coach approval.

GS selection: Domestic U16 GS requires a 17 m minimum radius. Turning 14 does not by itself mean buying an adult 30 m FIS GS ski.

SG purchase: Domestic U16 SG/DH requires at least 183 cm and 30 m radius. Coach approval is essential before buying or borrowing speed skis.

U.S. Ski & Snowboard race rules

- SL:** at least 130 cm. No SL radius minimum.
- GS:** at least 17 m radius. No specified domestic GS length limit.
- SG/DH:** at least 183 cm and at least 30 m radius.
- Stand height:** 50 mm max. Sole-to-footbed boot height: 43 mm max.

A slash means alternative model sizes, not a requirement to own both. Weight bands are approximate and overlap at the endpoints. Use a coach-led fitting outside the chart's range.

Sources: Derek Delzer, original Pinnacle sizing deck, slide 13. [USSS 2027 Equipment, p.2](#); [2027 Alpine Guide age table, p.20](#). All lengths cm; weights lb.

U16: equipment

Born 2011-2012

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings

Fit first

Current Gearpass examples: about 90 flex at 90-100 lb, 110 at 100-130 lb, and 120-130 at 130-160 lb. Fit, strength and ankle movement can justify a different choice. A race shop must fit boots and check bindings.

GS/speed helmet

Race rule

FIS RH 2013 hard-ear helmet for USSS GS, SG, DH, Kombi and parallel. Use a suitable helmet for SL, with a manufacturer-compatible chin guard for full-gate work. No helmet cameras or mounts.

Cut-resistant pants

Pinnacle requires

Pinnacle requires cut-resistant lower-body clothing at U16 and older. This is a club requirement, separate from national USSS rules. For any international FIS youth event, compliant three-star pants are mandatory now and the FIS youth ski rules apply.

Gate and body protection

Recommended / coach

SL shin and pole/hand guards, a fitted back protector, and padded layers appropriate to contact. Add GS arm guards when useful. The coach sets when gate-contact protection must be worn.

Race suit and daily kit

Regular race setup

A race suit, warm training layers, goggles with useful light options, gloves, ski socks and sized poles. Check that all protectors fit comfortably with the suit and boots.

Service and speed checks

Race rule + care

Shop-check bindings, plate compatibility and working ski brakes. Pole baskets cannot be metal. Use fluorocarbon-free wax. Review the exact speed-ski and equipment plan before a camp or speed race.

Buying priority

Plan the next step without forcing an early jump. The athlete should be able to bend and control the current ski while building toward the length and radius needed for the intended race pathway.

Sources: [USSS 2027 Equipment, p.4](#) and [Alpine Guide, pp.148-151](#); [Gearpass 2027 examples](#); [FIS Oct 2026, pp.29-35](#). Pinnacle cut-clothing policy: Director guidance.

U18 / high school / non-FIS

U18: born 2009-2010; also useful for older non-FIS racers / Fit the athlete and race series

Continue with SL and GS skis that suit the athlete and local courses. A high school or domestic USSS racer can follow a different progression from an athlete entering FIS.

Pinnacle non-FIS starting points by weight

Weight (lb)	GS ski (cm)	SL ski (cm)
90-100	165	142
100-110	170	149
110-120	175	150
120-130	182	157
130-150	182*	157*
Outside these bands	Individual fit	Individual fit

*Reference points from Derek's U16/U19 table, with the open-ended older band limited to its documented 130-150 lb portion. Height, strength and construction can lead the coach to a different choice.

High school pathway: Derek's progression examples settle near 175-180 cm GS and 155 cm SL for many developed high school racers. These are coaching examples, not universal size targets.

Which rulebook? School-only races use the current school/league rules. When the same athlete enters USSS, the domestic rules listed here apply. Confirm the season's MHSAA requirements with the school coach.

When entering a domestic USSS race

- SL:** at least 130 cm. No SL radius minimum.
- GS:** at least 17 m radius. No specified domestic GS length limit.
- SG/DH:** at least 183 cm and 30 m radius, if entered.
- Stand height:** 50 mm max. Sole-to-footbed boot height: 43 mm max.

A slash means alternative model sizes, not a requirement to own both. Weight bands are approximate and overlap at the endpoints. Use a coach-led fitting outside the chart's range.

Sources: Derek Delzer, slides 7-8 and 13. [USSS 2027 Equipment, p.1](#); [MHSAA coach resources](#). School-only starts follow their own current rules; USSS starts follow USSS rules.

U18 / high school / non-FIS: equipment

U18: born 2009-2010; also useful for older non-FIS racers

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings

Fit first

Use a race boot that fits and flexes appropriately for the athlete's size and skiing. There is no universal U18/non-FIS flex number. A shop checks sole/binding compatibility and sets/tests the bindings.

Helmet and SL chin guard

Check race series

USSS U14+ requires the FIS RH 2013 helmet for GS/speed/Kombi/parallel. The latest posted MHSAA manual (2025-26) requires hard ears in GS and an integral chin guard in SL. The school coach must confirm 2026-27 rules.

Cut-resistant pants

Pinnacle requires

Pinnacle's U16-and-older equipment expectation continues for U18 and older non-FIS racers. Choose the right size and coverage. A FIS-compliant three-star product is useful if the athlete may enter FIS later.

Gate and body protection

Recommended / coach

SL shin guards and pole/hand guards, a fitted back protector and suitable padding. Use the coach's instructions for full-gate protection. Add arm guards when GS contact makes them useful.

Race suit and layers

Regular race setup

A suitable race suit with warm layers for training and waiting. Keep spare gloves, appropriate goggles/lenses and ski socks in the race bag. Check that protective clothing works with the suit and boots.

Poles and service

Race rule + care

Working ski brakes and nonmetal pole baskets for USSS. No helmet cameras or mounts in official USSS training/racing. Use fluorocarbon-free wax for sanctioned USSS races and follow the school's equipment checks.

Buying priority

Non-FIS is a race pathway. It does not remove equipment rules from USSS starts. Buy for the actual race calendar and the athlete's ability to use the equipment.

Sources: [USSS 2027 Equipment, p.4](#); [MHSAA 2025-26 manual, p.5](#) (check current season); [FIS Oct 2026, pp.29-35](#). Pinnacle cut-clothing policy: Director guidance.

FIS

Ordinary licensed racing: born 2010 or earlier / Confirm event level before purchase

A FIS coach should approve the exact ski model, length, radius and construction before purchase. The ordinary FIS limits below differ from NorAm and other level 0-1 events.

Ordinary FIS levels 2-4: regulatory dimensions

Event	Women: length (cm)	Men: length (cm)	Minimum radius (m)
SL	155 minimum	165 minimum*	No minimum listed
GS	183-192	188-200	30, women and men
SG	200-215	205-218	40 women / 45 men
DH	205-218	213-223	50, women and men

*First-year U18 men may use a 155 cm minimum SL ski at FIS. The coach must verify the athlete/event exception. These are legal dimensions, not a personal fit recommendation.

NorAm and level 0-1 events: GS lengths: women 188-192 cm, men 193-200 cm, both at least 30 m radius. Speed lengths and airbag requirements also differ. Confirm the highest event level on the athlete's calendar.

Complete compliance: Length and radius are only part of the rulebook. The shop and FIS coach must also check widths, system weight, stand height, boot dimensions and the actual manufacturer's specification.

FIS equipment notes

Use the October 2026 equipment edition for 2026-27.

Stand height: 50 mm max. Sole-to-footbed boot height: 43 mm max. Additional whole-boot rules apply.

International FIS U14/U16 events have their own youth ski table. Do not apply the adult table to those events.

Sources: [FIS Equipment Specifications, 8 Oct 2026, p.10](#); [FIS ICR, sections 606-607](#). The adult table is for ordinary FIS starts, not international U14/U16 youth races.

FIS: equipment

Ordinary licensed racing: born 2010 or earlier

Equipment status identifies a race requirement, Pinnacle expectation or coach-guided purchase.

Boots and bindings

Coach + race shop

Choose fit, flex and setup for the athlete and events. Have the shop check the complete FIS system, including boot dimensions and binding compatibility. FIS participation alone does not prescribe one flex number.

Helmet

FIS rule

RH 2013 FIS-standard helmet for GS, SG, DH and parallel. SL permits a helmet meeting the specified SL standard and soft ears. Use a compatible SL chin guard as the coach directs. No helmet camera or mount.

Cut-resistant pants

FIS rule

Mandatory at every FIS Alpine event: at least three FIS stars, CRG 2021 conformity label and protection from the hip area to the top of the boots. Fit correctly and do not alter. Shirts/full suits are recommended.

Race suit

FIS conformity

Suit conformity rules apply outside SL. Choose a compliant race suit with the CS 2015 label to cover future progression. The label is explicitly required at level 0-1 events. The coach checks the exact start's requirement.

Back / gate protection

Recommended / coach

FIS recommends a fitted back protector. Use SL shin and pole/hand guards and suitable padding for gate contact. An airbag is required for level 0-1 speed events and official training, not ordinary SL/GS.

Daily kit and service

Race-ready setup

Goggles, gloves, warm outer layers, sized poles, functioning brakes and proper baskets. Keep skis professionally serviced. Bring event-specific pairs and verify current wax and equipment rules with the FIS coach.

Buying priority

A first FIS ski purchase should follow the race plan. Before ordering, confirm ordinary FIS versus NorAm, any first-year exception, and whether speed equipment is actually needed.

Sources: [FIS Equipment Specifications, 8 Oct 2026, pp.29-35](#); [FIS ICR, section 606.2](#). Check the exact event level with the FIS coach.

Height cross-check

Coach reference / All lengths in centimeters

Derek's original height model provides a second starting point. Reconcile it with the age/weight section, current ability and the race rules. It is not a one-number prescription.

Height (in.)	GS (cm)	SL (cm)
48-50	130	115
51-52	135	120
53	140	125
54	145	125
55	145	130
56	150	130
57	150	135
58	155	135
59	160	135
60-61	160	140
62	165	145
63-64	170	150
65	175	150
66	175	155
67-68	180	155
69	185	160
70	185	165
71-72	190	165

Rules still apply

These are historical coaching reference values. U14+ USSS SL must still be at least 130 cm and GS at least 17 m radius. The FIS table overrides the height model for FIS starts. U10 normally uses one multi-event ski.

Height helps check a choice. It cannot establish the right flex, radius or race category on its own.

Sources: Derek Delzer, original Pinnacle sizing deck, slides 9-10. [USSS 2027 Equipment, p.2](#); [FIS Oct 2026, p.10](#). Adjacent identical values are grouped without changing the original lookup.

High school development pathway

Derek Delzer's development model / All lengths in centimeters

Derek's progression examples plan ahead so equipment changes can be gradual. The athlete must still be ready for the chosen ski. Weight and height can justify a different length.

Development step	Boys GS	Boys SL	Girls GS	Girls SL
U14 step A	170	140-145	160	140-145
U14 step B	175	150	170/175	150
U16 step A	175	150	175	150
U16 step B	175	150	175	150
HS step A	180	155	175	155
HS step B	180	155	175	155

All lengths cm. A/B names distinguish the two sequential source rows; they do not prescribe a yearly purchase. Original U19 rows are shown as high school steps. The source's informal construction labels (junior/pro/race/WC) vary across brands.

How the coach uses the models together

The age/weight table, the height chart and the development pathway may suggest different lengths. The final choice depends on current technique, strength, ski flex, the event rules and the athlete's next step.

Before purchasing

Before purchasing, send the coach the athlete's height, weight, current ski lengths, exact proposed model/length/radius, and planned race series. Have a qualified shop check boot, binding and plate compatibility and set/test the bindings.

High school and USSS starts

Confirm the current school or league equipment rules with the school coach. When the athlete enters a domestic USSS race, U14-and-older SL must still be at least 130 cm and GS at least 17 m radius.

Sources: Derek Delzer, original Pinnacle sizing deck, slides 6-8. Current-rule checks: [USSS 2027 Equipment, pp.1-2](#); [FIS Oct 2026, p.10](#). Construction names vary by manufacturer.

Development toward FIS

Derek Delzer's development model / All lengths in centimeters

Derek's progression examples plan ahead so equipment changes can be gradual. The athlete must still be ready for the chosen ski. Weight and height can justify a different length.

Development step	Boys GS	Boys SL	Girls GS	Girls SL
U14 step A	170	145/150	165 - 170	135 - 145
U14 step B	175	150	175	145 -150
U16 step A	180	150/155	175	150
U16 step B	180 - 183	155	175/180	155
First FIS step	188	155* / 165	183	155
Later FIS step	188	165	183	155

All lengths cm. A/B names distinguish sequential source rows, not mandatory annual changes. *155 cm applies only to eligible first-year U18 men at FIS. The 183/188 cm GS examples are ordinary FIS minimums; NorAm and level 0-1 GS starts require longer minimums.

How the coach uses the models together

The age/weight table, the height chart and the development pathway may suggest different lengths. The final choice depends on current technique, strength, ski flex, the event rules and the athlete's next step.

Before purchasing

Before purchasing, send the coach the athlete's height, weight, current ski lengths, exact proposed model/length/radius, and planned race series. Have a qualified shop check boot, binding and plate compatibility and set/test the bindings.

Boot fit at every stage

Boot flex numbers vary by brand and model. A secure fit and the ability to flex the boot matter more than matching a catalog number. Have a bootfitter measure both feet and check shell fit, cuff height and heel hold. Avoid buying extra boot length simply for growth.

Sources: Derek Delzer, original Pinnacle sizing deck, slides 6-8. Current-rule checks: [USSS 2027 Equipment, pp.1-2](#); [FIS Oct 2026, p.10](#). Construction names vary by manufacturer.

Sources and scope

Checked October 11, 2026 / Linked titles open the source documents

Derek Delzer: original Pinnacle sizing deck

Supplied Ski_Size_2020(14).pptx, slides 6-13. Development, height and weight models. The new guide replaces the historical 2018-19 rule scans and describes current-rule sizing corrections.

U.S. Ski & Snowboard: 2027 equipment regulations

Supplied four-page PDF: U18+ p.1, U16/U14 p.2, U12/younger and waxing p.3, helmets/brakes/poles p.4. These domestic rules apply to the named USSS events.

U.S. Ski & Snowboard: 2027 Alpine Guide

Printed p.20: season birth-year table. Printed pp.148-151: equipment rules, including parallel helmet wording.

Alpine Ontario: Gear Guide User Guide 2026-27

Pages 3-5 and 10 explain Gearpass selection. Canadian guidance does not establish USSS or Pinnacle requirements.

Skiis & Bikes / Gearpass: public gear guide

Current 2027 product and boot-flex examples sampled by age and weight. U8-U16 coverage. Flex ratings are model examples, not universal fit standards.

FIS: Specifications for Alpine Competition Equipment

2026/27 edition dated 8 Oct 2026. Ski table p.10; protective equipment and helmets pp.29-35. Event levels and youth-event rules matter.

FIS: International Competition Rules

July 2026 edition linked 4 Sept 2026. Section 606.2 covers race suits; section 607 covers age eligibility.

MHSAA: Ski Manual and coach resources

2025-26 manual, PDF p.5, was the latest posted when checked. The school coach must confirm 2026-27 requirements. [Current AD/Coach page](#).

Atomic: Race Guide 2026-27

PDF p.6 / printed p.11: Redster G9 FIS Revoshock S J-RP3, 152 cm / 17 m. Radius-compatible U14 candidate for coach review.

HEAD: Canadian Recommendation Chart Winter 26/27

P.1: WC e.GS Rebel Team, 156 cm / 17 m, in the U12 model list. Used only as a radius-compatible example, not HEAD's standard U14 recommendation.

Rossignol: Race Guide 2026-27

PDF p.5 / printed p.8: Hero Athlete GS Pro R21 Pro, 158 cm / 17 m. PDF p.18 gives weight guidance. Coach review remains essential.

Pinnacle Director guidance. Pinnacle cut-resistant clothing expectation, carried forward from Director guidance: recommended at U14 and required at U16 and older. Club recommendations and buying priorities are coaching guidance. Event rules can add requirements.

The guide distinguishes race requirements, Pinnacle expectations and sizing recommendations. Verify the exact model and race category with the coach before buying.