

31. EQUIPMENT

The equipment listed hereafter is required for all ISMF events, including track inspections and official trainings.

The athlete is responsible of his/her own equipment.

Equipment type	Personal Protective equipment (PPE)	Technical equipment (not PPE)	Other
Equipment	Helmet, DVA, crampons, rope, harness, connectors and via ferrata kit, eyewear	Skis, binding, probe, shovel, boots, poles, survival blanket, gloves, backpack, whistle, headlamp, skins	Clothes
Production	must be produced by a supplier that: <ul style="list-style-type: none"> – Is registered in a chamber of commerce and industry. – Is registered for VAT in the nation of origin (Intra community number for the EU or similar manufacturers). – Has a product liability insurance, which covers the use of the equipment in ski mountaineering. 		No specific requirement
Standards	The labelled safety equipment must be CE and/or UIAA and/or other relevant international standards marked or comply with the requirements of a European rule in force (except for the helmets)	ISMF equipment rules	See marketing rules (e.g. IOC rule 50)
Modification	without any modifications, except by those authorised by the manufacturer in the written information supplied with the equipment. The athlete must have the written authorisation with the specifications of the modifications from the original manufacturer if it affects the structural integrity of the equipment and/or compromise the safety for the athlete and for others. This authorisation must be presented to the ISMF Technical Jury, if requested.	small adjustments which do not affect the structural integrity of the equipment and/or compromise the safety for the athlete and for others can be made. The athlete must have the written authorisation with the specifications of the modifications from the original manufacturer if it affects the structural integrity of the equipment and/or compromise the safety for the athlete and for others. This authorisation must be presented to the ISMF Technical Jury, if requested. Modifications with mandatory authorisation letter from the manufacturer: SKI BOOTS: system to lock the descent position of the boot	Can be modified

31.1. Equipment description for all ISMF events

ITEM	DESCRIPTION	CE or UIAA
A passport or a national ID card or copy	Required to be stowed away in the backpack or race suit. Every athlete must present an official ID document (passport or national ID card) or a copy if required.	

<p>A pair of skis</p>	<ul style="list-style-type: none"> – with metallic edges covering at least 90% of their length; – minimal width of at least 80 mm in the front, 60 mm under the boot and 70 mm in the rear part; – ski length must be of at least 160cm for men and 150cm for women. <p>The skis will be measured according to the method «Rolling».</p> <p>Minimal weight for skis and bindings:</p> <ul style="list-style-type: none"> – Men: 780 grams per ski. – Women: 730 grams per ski. 	
<p>Bindings</p>	<ul style="list-style-type: none"> – which allow heel movement during ascents and are blocked for descents; – they may or may not be equipped with security straps; – the binding system must have both a lateral and a forward complete release system (the boot is allowed to completely separate from the ski). The lateral release (front part) has to be lockable manually (without the use of <i>any tool</i>). – If a binding is TÜV certified, the locking mechanism is not necessary. <p>The use of ski brakes is compulsory. Athletes without ski brakes cannot participate in the race.</p> <p>Ski brakes:</p> <p>Retention device for ISMF events which is designed to slow down a ski after a ski binding release or ski loss.</p> <ul style="list-style-type: none"> – Ascent position: Arrangement of the ski brake during the ascent phase – Descent position: Arrangement of the ski brake during the descent phase. – Braking position: Arrangement of the ski brake when set in descent position and the boot is released from the binding. <p>Mixed bindings (front part from one manufacturer and rear part from another one) are not allowed.</p> <p>Boots and bindings must be set according to the manufacturer's instructions in order to guarantee optimum function of the release systems and the best protection of bindings and ski structure.</p>	
<p>Boots</p>	<p>Minimal weight for boots (shell and dry inner):</p> <p>Men and U20 Men: 500 grams All Women categories & U18 Men: 450 grams</p> <p>In case of bikini liners, only the shell must cover the ankles.</p> <p>Each boot must have at least two (2) independent closing systems.</p> <p>Boots must be designed to be used with metallic crampons.</p> <p>Cross-country ski boots and bindings or equivalents are strictly forbidden.</p> <p>Sole:</p> <ul style="list-style-type: none"> – Notched rubber soles. – The notched soles have to cover the 100% of the boot sole. – The minimum notch depth is 4 mm. – The minimum surface area of 1 cm² per notch. – There must be at least 8 notches under the heel and 15 under the front part of the sole. <p>Modified boots by a second manufacturer are allowed only if there is a formal agreement between the two manufacturers, which is specified in the written information supplied with the modified part.</p> <p>Athletes in the U18 and lower category are not allowed to wear/use full carbon structured boots (including carbon composites or similar: Kevlar, aramite, etc.).</p>	
<p>A pair of ski poles</p>	<p>Carbon or other material</p> <p>Maximum diameter of 25 mm</p> <p>With non-metallic baskets.</p>	

A pair of removable anti-slipping skins	Skins originating from wild animals are strictly forbidden. The skins have to cover at least 40% of the snow contact length of the ski. The skin tip attachment system is an integral part of the skins (for example: the elastics). Use of adhesive tape is forbidden on the skins for environmental reasons.	
Upper body clothing	Athletes must wear a long-sleeved ski suit or long-sleeved layer, designed to cover the arms to the wrists. Sleeves may be rolled up but must still cover the arms up to and including the elbows. This is the compulsory layer. In addition, the following upper-body layers may be required depending on weather conditions. The ISMF Technical Jury will decide whether each must <i>be worn, carried in the backpack, or is not required</i> : – <i>Additional Layer A (Base Layer)</i> : • A body-hugging top (long-sleeved, short-sleeved, or sleeveless). • Sports bras are not accepted as a base layer. – <i>Additional Layer B (Outer Layer)</i> : • A long-sleeved windbreaker jacket, appropriately sized to fit over other layers.	
Lower body clothing	Athletes must wear ski pants or a ski suit covering the entire length of the legs. Underwear only is not permitted. This is the compulsory base layer. The following lower-body layer may be required depending on weather conditions. The ISMF Technical Jury will decide whether it must <i>be worn, carried in the backpack, or is not required</i> : – <i>Outer Layer</i> : • Windbreaker pants made from breathable material, sized to fit over the base layer.	
An avalanche victim detector	Also called DVA or ARVA, that conforms to standard EN 300718 457 kHz frequency. The DVA has to be equipped with a 3 antennas receiving system. The DVA has to be worn in a closed pocket (zipper only) inside of the race suit at the belly level or as defined by the manufacturer.	YES
A helmet	Conforming to: - UIAA 106 and EN 1077 class B standards. - EN 12492 and EN 1077 class B standards. Helmets must be used (chin-strap has to be fastened) during the whole race (from the start to the finish line).	YES
A snow shovel	Conforming to ISMF standards (refer to appendixes).	
A snow probe	Conforming to ISMF standards (refer to appendixes).	
A survival blanket	The minimum surface area of 1.80 m ² . Modifications subsequent to manufacture are not allowed. The term "survival blanket" is as defined by the manufacturer.	
A pair of gloves	That covers the entire hand up to the wrist - to be worn throughout the duration of the race.	
A pair UV-protection eyewear	Recommended for the athletes (refer to appendixes).	
A backpack	With sufficient carrying capacity to hold all the equipment required and listed by the rules and requested for the race, with two rear and/or lateral fastening straps for carrying skis. In the event of cooperation between teammates, the carrier's backpack must have two independent sets of fastening straps for skis. If the backpack has an independent crampons pouch, the pouch must be securely fastened to the back of the backpack (using Velcro straps, etc.). Crampons must be secured in the appropriate compartment of the backpack worn on the back.	
A whistle		
SUPPLEMENTARY EQUIPMENT THAT MAY BE REQUIRED BY THE ISMF TECHNICAL JURY		
A pair of metallic crampons	That conforms to UIAA standard 153, with at least 10 spikes. The two front spikes must adjust to fit the athlete's boots. They must have the original safety straps that should be properly fastened to all crampons during the on-foot portion of the race. When crampons are not worn on boots, they must be packed in the backpack or in the independent pouch carried on the back, with spikes facing each other.	YES
A harness	Conforming to UIAA standard 105	YES

Via Ferrata kit	With energy absorbing system for use in Via Ferrata Kit conforming to UIAA standard 128.	YES
Two (2) connectors - Via Ferrata kit connectors	That conform to UIAA standard 121. When the lanyard and the 2 connectors are not in use, they must be put away in the backpack or wrapped around the waist.	YES
An additional upper body thermal fleece layer of clothing	(Fourth layer with long sleeves) The sleeves must fit the athlete well. The fourth layer is comprised of thermal clothing which must have a minimum weight of 250 grams for women and 280 grams for men.	
A ski cap or headband		
A second pair of gloves	that must be thermal and wind-proof.	
A Head lamp in full working order;		
A second pair of UV-protection eyewear	Recommended for the athletes (refer to appendixes).	
A dynamic rope	That conforms to UIAA standard 101, with a minimum diameter of 8,5 mm and a length of 30 m.	YES
Skins	The ISMF Technical Jury has the right to request additional skins.	
Wax	Use of fluorinated wax or tuning products containing fluorine is prohibited for all ISMF events (disciplines and levels).	