

“LISKI” B-NET Protection System

1) INTRODUCTION

Liski, thanks to its fifty years experience in the agonistic and touristic ski field, is an Italian company active on the national and international market, with a full range of products for preparation of race slopes for alpine skiing, cross-country and snowboard, and also with signs systems and security equipment for every type of ski slope and ski resort.

Liski main priority is the research for high-performance and safe materials, thanks to lead technologies and collaboration with World Cup circuit teams and ski resort experts.

Starting from the beginning of its activity, the strict synergy between Universities and specialized Experimental Search Laboratories ensured the preparation of safety materials, that are subjected to the laboratory crash tests, along with the extensive testing on the field.

The LISKI B-NET is a safety net system conforms to the classification for ski racing at World Cup ski events. Liski is an official supplier of most important national ski team and also for very important ski events in the World like Olympic games and World championships.

Every years many hundreds of kilometers of this system are installed in many ski resorts in the World and these nets save the life of hundreds of people, we have continued to receive numerous positive feedback from installation crews, race organizer committees, technical delegates, coaches, and everyone involved in making ski racing.

Design, manufacturing and assembly of LISKI B-NET system are made in Italy, synonymous of quality and professionalism; these systems are very easy and fast to use and to assemble, technical specification, installation guidelines and fully documented testing reports are available also on the LISKI web site (www.liski.it).

2) MATERIALS

NET

Material: Polyethylene (PE).

Dimensions: Length 15 m, height 2 m, plait \varnothing 3,5 and mesh 50x50 mm or 70x70 mm.

Weight: 370 g per meter (mesh 70X70 mm), 540 g per meter (mesh 50X50 mm).

Properties: High abrasion, cut and atmospheric agents resistance (also UV rays).

SUPPORT POLES

Material: Polycarbonate (PC).

Dimensions: Height 2,5 m and \varnothing 35 mm suggested by F.I.S.

Quantity: 11 support poles per net (or less depending by the specific situations)

Properties: Atmospheric agents resistance (also UV rays) and easy and fast to replace.

HOOKS

Material: Nylon (PA) and polycarbonate (PC).

Dimensions: \varnothing 35 mm with clip.

Quantity: 3 hooks per support pole.

Properties: Atmospheric agents resistance (also UV rays) and easy and fast to replace.

3) BEFORE USE

These installation guidelines apply exclusively to factory assembled integrated LISKI B-NET systems. Use of individual components outside of factory assembled integrated LISKI B-NET systems, and/or any substitution or modification of any components may cause serious injury or death.

Ski racing are potentially dangerous sports and the LISKI B-NET system must be installed in conformity with these installation guidelines as a second choice should A-NET systems not be available or practical. If installation is effected (in whole or in part) outside of installation guidelines, the efficacy of the LISKI B-NET system may be seriously compromised. Any installation effected outside of recommended parameters should be recorded, detailed and be conducted under the supervision of a qualified authority.

LISKI recommends that B-NET systems be installed during training and with the same standard of care and concern as would be given during a race. Risk of a skier fall may be greater during training as more runs are performed and often new equipment and techniques are tested during training.

The installation of LISKI B-NET systems must only be carried out by personnel who have received and reviewed all of the information contained in the present document.

Each installation must be documented and a listing of the personnel who participated in the installation, including their names, telephone numbers and level of competence must be kept and made available to the LISKI representative on demand. Installation situations which are not described in these pages must be avoided wherever possible and resolved and corrected only by a qualified authority. Detailed records of any non-manual installations (including measurements and sketches of installations) should be prepared and conserved until successful termination of the event.

4) PREPARATION

Inspect equipment before use. Do not use if you have any doubts about the installation of this product or if you suspect that the materials may be damaged or unfit for use.

Identify potential obstacles to the trail (snow gun, trees, tower, etc.). Both sides of the entire race course should be protected by LISKI B-NET systems for all training and race events as the skier's probable spill zones may not be accurately predicted. In addition, where appropriate, follow the security recommendations provided in the course homologation report.

5) INSTALLATION

To put the poles into the snow, ice or ground LISKI suggest to use a \varnothing 35 mm drill bit, normally these nets are assembled at the distance of about 10mt from the area to protect.

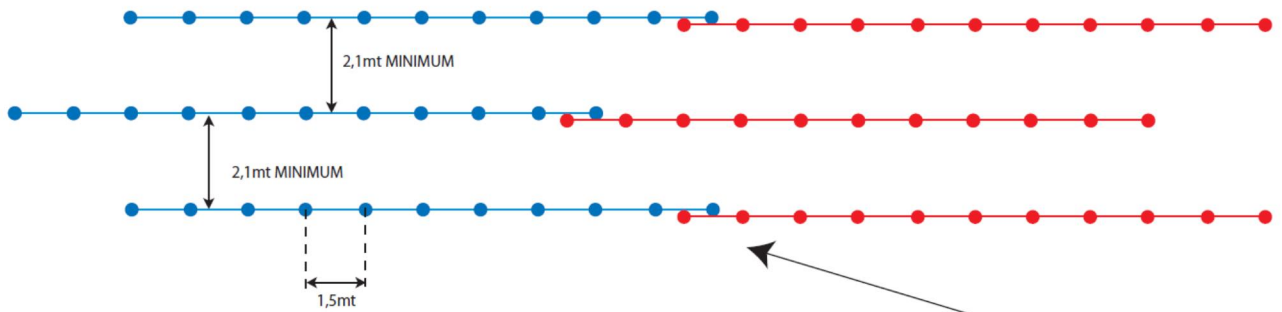
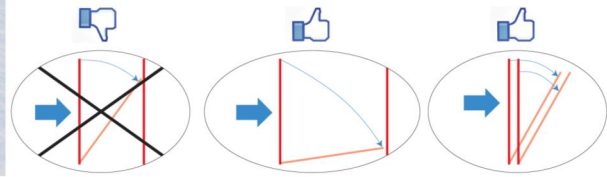
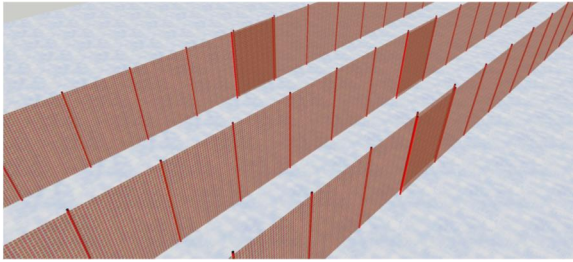
Assemble the protection system putting the net into the 3 pole hooks; the hooks should be all at the same height (1 at top, 1 at center, 1 at low of the pole), the lower hook should be forward down, the others forward up.

The groups of net, all of the same kind, should be attached and the "uphill" group should surmount the "downhill" group for about 50cm, opening in the lower part of the nets should be not present, to avoid the missed braking or blocking of a fallen skier; do not align joints of net sections in the same direction of impact of the skier.

The number of rows that must be placed depending by situation and by danger level, LISKI B-NET can be placed in 1,2,3 or more rows; install the second row of net parallel to the first net, the distance between the nets should be as described in the set-up model.

Behind the last B NET row, a mattress or delimiting net can be assembled, the distance between two support poles should be from 1 m to 1,5 m.

“LISKI” B-NET PROTECTION SYSTEM SET-UP MODEL



IMPACT DIRECTION

The “Uphill” group (red) should surmount at the “Downhill” one (blue) to avoid that the fallen skier can impact and pass through the only opening of the net, at the joint by two net groups.

PROTECTION SYSTEM TYPE “B”

nr. 3 or more rows made with :

- nr. 2 or more groups of 15m x height 2 m of braided net, plait \varnothing 3,5mm and mesh 50x50mm (for races) or 70x70mm
- nr. 22 polycarbonate poles \varnothing e 35 x h 2500mm, with 3 net hooks each (nr. 11 poles for each group)

6) AFTER USE

The inspection of LISKI B-NET systems must be carried out before and after each use by personnel who have received and reviewed all of the information contained in the present document.

Maintain an updated logbook of the frequency of use of this product

After use remove snow/ice from nets and support poles, align net to be re-wound in a straight line, rotate the first support pole along the net to create a bundle and place the nets in the appropriate transport/storage cradles.

Nets should be stored clean, dry and out of direct sunlight, and away from extreme heat and in a well-ventilated warehouse. Nets should be kept off the floor and stored upright, on racks, to provide ventilation underneath. It is better to store the nets vertically to allow drainage and prevent contact of the fiber with the ground. Never store directly on a concrete, metal or dirt floor, and under no circumstances should nets and/or acid and/or alkalis be kept in the same building. Product life will be shortened by chemical and corrosive products or excessive temperatures.