

Helsport 2007::



Tents for extreme conditions

Equipment in the X-trem-range can be used under extreme weather conditions. Materials and constructions have been developed in co-operation with many expeditions



Tents for harsh conditions

Equipment in the Pro-range are very compact and lightweight and are designed to be used under harsh weather conditions. Materials and constructions are developed for this purpose during many years of trials.



Light and functional quality tents

Equipment in the Trek-range are constructed for normal use in the Mountains. The products have all the features necessary for a high quality mountaineering product, these features have made Helsport famous all over the world

How to select the right tent

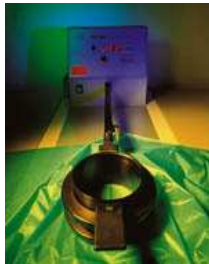
When you buy a Helsport-tent you will have bought high quality mountaineering tent. As one of the pioneers in the development of mountaineering tents, we know how to construct a tent for the Mountains and the requirements of the materials used.

In the [TREK](#) section you can read about Helsport's unique combination of design features plus the high quality of the materials and construction techniques used to produce tents that you will appreciate more and more. In the [PRO](#) and [X-trem](#) sections the additional features of these products are explained.

TREK

Correct choice of materials

There is a wide variation in price between the highest quality materials and components and those lower down the scale. With fabrics this means big differences in durability, waterproofing and strength. Choosing the right materials is therefore very important in ensuring a product's long term durability. If you listen to experienced people, they will tell you a lot about this.



Outer fabric, Helsport Rainguard®

Helsport Rainguard's development was based on many years of experience testing and close co-operation with suppliers. It is difficult to compare fabrics from different suppliers of tents because of variations in test methods which show different figures. The water column is among the most common figures to be used to show the water-proofness of tent fabrics. The different test methods can show a 2-300 % difference in results. In our opinion the water column test is just one of many important figures in selecting a high quality fabric for the outer tent.

It is the combination of the following 6 properties that make Helsport Rainguard® such a desirable fabric:

- at least 4000 mm water column gives a waterproof fabric.
- ripstop and close weaving give high strength and durability
- quality coating ensures long term waterproofing and durability
- fabrics made from polyester with high resistance to U.V.
- polyester fabrics are very stable, this means that the stretch of the fabric is consistent under different weather conditions
- polyester fabric used has a special rot proof treatment

Inner tent fabric

The inner tent fabric is made by polyamide. The fabric is siliconised to make it water repellent yet breathable enough to let the moisture pass through the fabric. Weight only 60 gr/m².

Ground sheet

The ground sheet fabric is similar to our outer fabric but stronger and has higher water column figures.

Helsport Airflow® II ventilation system

Working in co-operation with the scientific institute, SINTEF, who are based in Norway, we have developed a ventilation system which will:

- help to reduce the condensation inside both the outer and inner tent
- help to improve the quality (reduce CO₂) of the air inside the inner tent
- help to improve the quality of your sleep

Before we explain about how the Helsport Airflow® ventilation system works, it is important to know how condensation arises.

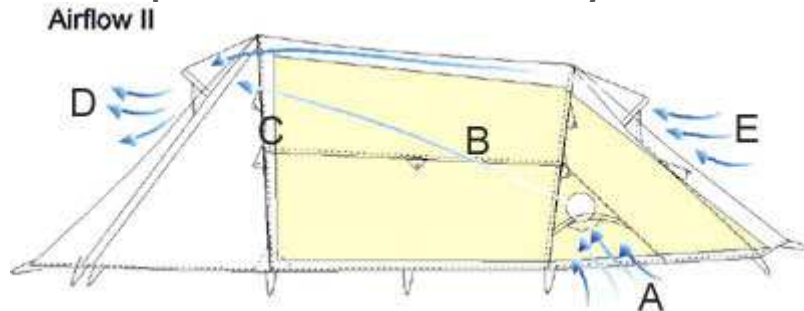
Condensation in tents

Condensation in tents comes mainly from 3 sources:

- from the people in the tent
- from high humidity in the air
- from the ground

There is most condensation when there is high humidity and /or low temperatures.

How Helsport Airflow® II ventilation system is works:



- Air comes through the circulation vent (A) in the outer tent or under the tent. It then passes through a vent in the inner tent (A).
- The air goes through the inner tent (B) and will reduce the value of CO2 in the inner tent. This makes living and sleeping in the tent much more comfortable.
- The air (with CO2) will go out of the mosquito net in the door (C) at the front of the inner tent (it's important that you open this) and will then go exit the tent through the vent at front of the outer tent (D)
- In addition we have a vent (E) on the outer tent to provide an air stream from E to D and so reducing the condensation in the outer tent. Models Pasvik, Rondane and Stetind do not have this additional vent (E) because vent (A) does this job on these models.

Sewing methods and thread

How you construct a tent is very important. We mostly use double-needle seams (fig. 1) to increase the strength of the seam. All stress points have an additional bartack to ensure maximum strength. We use a thread special developed for use in tent construction. In the middle it is a polyester thread for strength and around that cotton threads which expand to make the seam waterproof. If there are any small leakage points you can apply seam sealant.

Guy points and peg loops

All guy points and peg loops are reinforced and strengthened by using bartacks.

We have equipped our models with enough guy points and peg loops to ensure security in bad weather conditions.

Zipper

The quality of the zipper is important, and we use zipper from the world's most famous quality manufacturer, YKK.

New Unique pole system

Helsport have introduced a complete system with 3 very important components:

- tried and tested poles
- our unique pole sleeve system
- designed for speedy tent erection

New and stronger poles

Helsport is introducing a new pole, Helsport Super-pole® 1000, for tents in the Pro and X-trem range. Our standard tent poles have a specific dimension and pre bend based on the poles length, radius and thicknes.

Using an improved alloy, Helsport Superpole® 1000 have:

- better resistant against permanent bending
- increased breakage resistance
- 100 % anodised, totally protected against corrosion

We include with all our tents an extra section and a repair sleeve in case you are unlucky enough to break a pole.

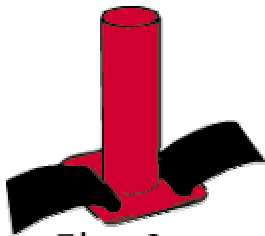


Fig. 2



Unique pole

Over many
discussion

the pole sleeves outside or inside the outer tent. Both systems do have their advantages.



Fig. 3

sleeve system

years there has been a
about if it is best to have the

Helsport have developed a new unique system which combines the advantages of both systems:

- internal pole sleeves give more waterproof seams
 - internal pole sleeves increase wind stability
 - internal pole sleeves reduce wind noise
 - you slide the pole in from the outside (the sleeve is closed in the other side)
- which is easy and quick to adjust.

The tent is quick to erect

The Helsport tent has also the following advantages:

- the opening of the pole sleeve is marked with reflective tape which is easy to see in the dark
- our pole holder is easy to use and extremely strong
- the pole sleeves are made from very strong polyamide
- the system of adjusting the poles is easy to operate
- the pole sleeves are large making erection quick

Linking the inner and outer tent

The inner and outer tent can be clipped (fig. 3) together.

If you start with the red clips (for some models there is red webbing) you will always connect the inner and outer tent correctly. The red clips are marked with reflective tape to aid erection in the dark.

By having the inner and outer tent separate it is possible to share the weight for carrying.

It is not necessary to divide the inner and outer tent after use, this means the inner and outer tent can be erected at the same time. When erected, you can unclip the inner tent to obtain a much larger space inside the tent.

Other important details

In addition Helsport tents are equipped with:

- hanging loops in the inner tent for lanterns etc.
- securing points for rolling back inner and outer tent doors
- pockets in the inner tent
- mosquito net panels in the door of the inner tent and the large side entrance of the outer tent
- very strong pegs
- coloured guy-lines which are easy to see

Tents in the Pro-range have all the advantages you read about above. If you are looking for an even more lightweight tent with yet higher quality and security levels, you should consider buying a Pro tent.

PRO

A new and stronger outer tent fabric, Helsport Superlight® 1000.

After years of a close co-operation with supplier of fabrics, we introduce a new and unique outer tent fabric, Helsport Superlight® 1000. The nylon fabric is coated with silicon coating on both sides. This fabric and coating is waterproof, UV resistant, has high durability and a tear strength more than 6 times higher than that of normal outer tent fabrics.

Lighter inner tent fabric

For the Pro-tent we use a ripstop nylon. It is stronger and even lighter, just 40 gr/m². Stronger ground sheet The ground sheet of the Pro tents is even stronger and with a higher water column. This is due to the coating with Silicon-Elastomer.

Unique small pack size

The pole sections are just 32 cm long, this makes it possible to make the pack size very small (see picture of Rondane). We have also made a special compression bag to make packing even easier.



X-TREM

Tents in the X-trem range do have all the advantages you have read about above. If you are looking for a tent for extreme conditions, you should consider buying an X-trem tent. Please note that Svalbard and Rundhø Expedition do not have pole sections of 32 cm which will not reduce the pack size of the tent.

An even stronger outer tent fabric, Helsport Superlight®.

Over many years we have had a close co-operation with Carrington Performance Fabrics. Together we have developed a unique outer tent fabric, Helsport Superlight®. The fabric is coated with Silicon-Elastomer. This coating is very strong and the tear strength is more than 8 times higher than that of normal outer tent fabrics. The UV resistance is also excellent.

Snow flaps

All the tents in the X-trem range do have snow flaps all around the tent. Snow flaps can be used if it is difficult to find places in the ground for the pegs. This could be the case in sand and rocky mountains. Snow flaps are also useful under very bad weather conditions for extra security.



Reinforced guy points

All the tents in the X-trem range have many additional guy points which help in heavy winds.

Gear loft in the inner tent

Gear loft of mosquito net in the inner tent, for storage and drying.



Length of inner tent

All the tents in the X-trem range have 10 cm longer inner tent, in wintertime you need more space.