

TEMPERATURE RATINGS

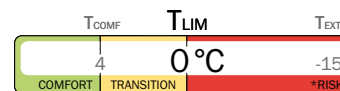
EUROPEAN STANDARD EN 13537

We rate our sleeping bags according to the European standard EN 13537. This is a standard for how to test and rate sleeping bags, in order to be able to compare sleeping bags from different producers. The standard gives three temperature values T_{COMF} , T_{LIM} and T_{EXT} . The temperature ranges between the values are zones for the recommended usage temperatures.

Green zone above T_{COMF} : Green zone is called the comfort zone and in this temperature range most people will be able to sleep comfortably.

Yellow zone between T_{COMF} and T_{LIM} : Yellow zone is called a transition zone between comfort and risk. In this range many people can sleep comfortably, but some may also start to freeze (see more info below).

Red zone between T_{LIM} and T_{EXT} : The red zone is the risk zone and in this range a strong sensation of cold has to be expected. There is risk of hypothermia. An average woman can only tolerate this for six hours.



*In the risk zone a strong sensation of cold has to be expected. There is a risk of health damage by hypothermia

WHEN TO USE THE SLEEPING BAG IN REAL LIFE?

It is important to know that the temperature rating is valid for an average person, in an average situation. When you are out hiking, no single trip is the same. People react differently to cold, our daily shape varies and the surroundings will change every time. A fit, experienced hiker on an easy trip will not need as warm a sleeping bag as the inexperienced, first-time user on a strenuous adventure. Helsport therefore advises to choose sleeping bag after first considering two main aspects:

1. YOUR OWN PHYSIQUE:

- How easily do I normally get cold?
- How experienced am I at sleeping outdoors?
- How good is my current shape?

2. USAGE SCENARIO

- What kind of trip am I going on?
- How hungry and tired will I be when I'm going to sleep?
- How well protected will I be? (in a cabin, under the open sky, what kind of sleeping mattress, extra clothing etc.)
- How much weight can I accept to bring?

After considering own needs, each user can choose when to use the sleeping bag:

Use sleeping bag in green zone if:

- You freeze easily
- You are unfamiliar with sleeping outdoors
- You are female
- You haven't slept or eaten properly
- You are sleeping exposed (for example under open sky)
- You wish to have a bigger safety margin

Using the sleeping bag in yellow zone requires:

- Use of good insulation mat
- That you cover up for wind and humidity
- That you every day dry the sleeping bag after use.
- That you use dry wool underwear (or similar) and a warm hat if necessary.
- You use the heat trap collar and close the sleeping bag properly

Use sleeping bag at your own risk in red zone only if:

- You very seldom freeze
- You are experienced at sleeping outdoors
- You are willing to prioritize low gear weight instead of comfortable sleep

The three temperature values are determined as follows:

T_{COMF} - Comfort temperature for standard woman in relaxed position

T_{LIM} - Limit temperature for standard man in rolled-up position trying to stay warm

T_{EXT} - Risk temperature for standard woman with cold stress in rolled-up position, can only be maintained for six hours.

Limitations in the standard:

For longer trips and expeditions an extra safety margin should always be applied. The user is responsible for testing the gear's temperature limits prior to such trips.

The temperature standard EN 13537 does not apply to children's sleeping bags. Children have different physiological regulation than adults. The temperature stated is only a reference to the corresponding adult size bag. Children should add an extra safety margin, and adults are responsible for keeping children in their group warm.